CD 020 273 5

ECAB (Paul Little)

WASTE MANAGEMENT

Vickery Facility
A Waste Management Company
3956 State Route 412
Vickery, Ohio 43464
419-547-7791
Fax: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

April 12, 2000

Ohio Environmental Protection Agency (7099 3400 0008 3893 8339)
Division of Hazardous Waste Management
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (7099 3400 0008 3893 8322)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Waste Management of Ohio, Inc. - Vickery
Tank System Release Report

Dear Sirs:

Enclosed please find the tank system release report for Waste Management of Ohio, Inc. Vickery facility (WMO) which is being submitted in accordance with Part B Permit Condition D.8(b) and 3745-55-96(D)(3). The attached document describes an incident which occurred on March 15, 2000.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and

belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

WASTE MANAGEMENT OF OHIO, INC.

Stephen C. Lonneman
General Manager

SCL/slc

Attachment

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Tank System Release Report

(1) **Date of Release:** March 15, 2000
Time of Release: 9:00 am
Type of Incident: Vent valve on pipeline was left opened.
Weather Conditions: No precipitation.

(2) **Reported to:** **OEPA-EMG** - 9:38 am - #00-03-72-0872 - G. Lauck; **OEPA-NWDO** - 9:44 am - Left message for Ms. Beth Ames. **OEPA Onsite Inspector** - 9:55 am - Dave Schilt.

(3) **Date Reported:** March 15, 2000.

(4) **Released Material:** Wastewater with approximately 8-14% ammonium hydroxide and 88-92% water, with waste codes D007, D018 and D038.

(5) **Amount Released:** Approximately 5 gallons to the soil.

(6) **Location of Release:** Well 4 transfer line at east/west pipe bridge.

(7) **Source of Release:** Vent valve on transfer line.

(8) **How was Release Stopped:** The transfer was stopped and the vent valve was closed.

(9) **Cause of Release:** Employee error. When line was drained the vent valve was not closed. In addition, during the pre-inspection, the employee did not notice that the vent valve was opened.

(10) **Description of Response Actions Taken or Planned:** Facility responded immediately. A field operations personnel was in the area and immediately called for the transfer of operations to stop. The surface water management gates in the area were already closed as that is the procedure for when that line is in operation. The ditch was diked with soil. The wastewater and water that was in the ditch was vacuumed into a vacuum truck. Soil was removed in the area until there was no evidence of contamination.

(11) **Estimated Quantity and Disposition of Recovered Material that Result from the Incident:** Approximately 400 gallons of water from the ditch that was mixed with the wastewater was vacuumed into a vacuum truck and transferred to the Integrated Aqueous Waste Treatment System for deepwell disposal.

Approximately 8 yds. of contaminated soil was collected and transferred to a rolloff box which will be properly disposed of.

(12) **Description of monitoring or sampling:** No monitoring or sampling was performed. Following the clean up, the area was inspected by Mr. Dave Schilt, Ohio EPA Onsite Inspector, and it was determined that clean up was adequate.

(13) **Assessment of actual or potential hazards to human health or the environment:** The potential hazard to human health and the environment was mitigated at time the release was discovered. The spill was contained and the soil was cleaned up.

(14) **Extent of injuries:** There were no injuries.

(15) **Likely route of migration of the release:** The material did not migrate beyond the area just below the pipeline. In addition, the facility has in place an extensive surface water management system through which surface water runon and runoff are controlled by a series of ditches and culverts inter-connected by 31 slide gates. By use of the slide gates, any spill on site can be isolated, thereby preventing off-site migration and facilitating cleanup.

(16) **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

(17) **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, downgradient of the incident, approximately 330 yards to the north. Pavement, containment and buildings are located between the spill area and the well. The depth of the potable well is approximately 70 feet. This well is no longer utilized to provide water for the site as all of the potable water supplies are hauled water. The nearest surface water is Meyers Ditch. The distance to Meyers Ditch from the area is approximately 230 yards to the southwest. Meyers Ditch is separated from the release area by a series of ditches, dikes and surface water management gates. As noted above, the surface water management gates in the area were in the closed position prior to the incident. In addition, soil was utilized to provide additional diking. Because the spill was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

Form Completed By: Sandra L. Clark
Environmental Technician

WASTE MANAGEMENT

[redacted]

Vickery Facility
A Waste Management Company
3956 State Route 412
Vickery, Ohio 43464
419-547-7791
Fax: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

January 27, 2000

Ohio Environmental Protection Agency (P 289 177 935)
Division of Hazardous Waste Management
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 289 177 936)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: [redacted]
Tank System Release Report

Dear Sirs:

Enclosed please find the tank system release report for Waste Management of Ohio, Inc. Vickery facility (WMO) which is being submitted in accordance with Part B Permit Condition D.8(b) and 3745-55-96(D)(3). The attached document describes an incident which occurred on January 17, 2000.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and

belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

WASTE MANAGEMENT OF OHIO, INC.

Stephen C. Lonneman
General Manager

SCL/slc

Attachment

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Tank System Release Report

(1) **Date of Release:** January 17, 2000
Time of Release: 7:45 am
Type of Incident: A crack developed in an elbow of a pipeline and a small quantity of material dripped onto the ground.
Weather Conditions: Approximately 20 degrees F. No precipitation.

(2) **Reported to:** **OEPA-EMG** - 9:00 am - #00-01-72-0195 - Dispatcher Fellure and Todd Taylor; **OEPA Onsite Inspector** - 9:02 am - Dave Schilt - Left message as he was not at facility. **OEPA-NWDO** - 9:03 am - Left message for Ms. Beth Ames.

(3) **Date Reported:** January 17, 2000.

(4) **Released Material:** The pipeline had been rinsed with water; therefore, material was rinsewater. The material last in the line was waste acid which carried waste codes D002 and K062.

(5) **Amount Released:** Less than 1 gallon to the soil.

(6) **Location of Release:** North side of V-tank building.

(7) **Source of Release:** Unloading pipeline.

(8) **How was Release Stopped:** A bucket was placed under the pipeline. The line was drained and the elbow and a small section of the pipeline was replaced. The pipeline was pressure tested and was returned to service.

(9) **Cause of Release:** Crack developed in elbow in pipeline.

(10) **Description of Response Actions Taken or Planned:** Facility responded immediately. Contaminated soil was removed and will be properly disposed of. The pipeline is scheduled to be replaced.

(11) **Estimated Quantity and Disposition of Recovered Material that Result from the Incident:** Approximately 35 lbs. of soil was collected and transferred to a rolloff box which will be properly disposed of.

(12) **Description of monitoring or sampling:** Due to the small quantity spilled, and the fact that the area was cleaned up immediately there was no monitoring or sampling performed.

(13) **Assessment of actual or potential hazards to human health or the environment:** The potential hazard to human health and the environment was mitigated at time the release was discovered. The spill was contained and the soil was cleaned up.

(14) **Extent of injuries:** There were no injuries.

(15) **Likely route of migration of the release:** The material did not migrate beyond the area just below the pipeline. In addition, the facility has in place an extensive surface water management system through which surface water runon and runoff are controlled by a series of ditches and culverts inter-connected by 31 slide gates. By use of the slide gates, any spill on site can be isolated, thereby preventing off-site migration and facilitating cleanup.

(16) **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

(17) **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, upgradient of the incident, approximately 150 yards to the south. Pavement, containment and buildings are located between the spill area and the well. The

depth of the potable well is approximately 70 feet. The nearest surface water is Meyers Ditch. The distance to Meyers Ditch from the area is approximately 275 yards to the west. Meyers Ditch is separated from the release area by a series of ditches, dikes and surface water management gates and a roadway. Because the spill was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

Form Completed By: Sandra L. Clark
Environmental Technician

Waste Management of Ohio, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 20, 1998

Ohio Environmental Protection Agency (P 311 952 083)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 311 952 084)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Waste Management of Ohio, Inc. - Vickery
Incident Report/Contingency Plan Report
Tank System Release Report

Dear Sirs:

On August 18, 1998, Waste Management of Ohio, Inc. - Vickery (WMO) experienced a release from a portion of its tank system. Enclosed please find a copy of the spill and contingency plan report which is being submitted in accordance with Part B Permit Condition B.30 and OAC 3745-54-56(J) and the tank system release report which is being submitted in accordance with Part B Permit Condition D.8(b) and OAC 3745-55-96(D)(3). The attached document describes the incident, our response actions, actions taken to prevent further release, clean up procedures followed, and repairs made to the system.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that

qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

WASTE MANAGEMENT OF OHIO, INC.

F.G. Nicar
General Manager

FGN/slc

Attachment

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Spill/Contingency Plan Report and Tank System Release Report
Incident #39

(1) **Owner/Operator Name:** Waste Management of Ohio, Inc.
Address: 17250 Newburgh Road Suite #100
Livonia, MI 48152-2618
Telephone Number: 313-462-6900

(2) **Name of Facility:** Waste Management of Ohio, Inc.
Address: 3956 State Route 412
Vickery, OH 43464
Telephone Number: 419-547-7791

(3) **Date of Release:** August 18, 1998
Time of Release: 6:30 pm.
Type of Incident: Overhead unloading line hit by a van trailer. Van trailer with totes was being pulled into sampling bay for sampling.
Weather Conditions: Approximately 78 degrees F. No precipitation.

(4) **Reported to:** On 8/18/98: **OEPA-NWDO** - 7:43 pm - Mr. Chuck Hull - Left message; **National Response Center** - 7:45 pm - Turman #451185. **OEPA Onsite Inspector** - 8:00 pm - Dave Schilt - Left message.

8/19/98: **OEPA-EMG,** - 8:06 am - #9808-72-3876 - Todd Taylor. Person making telephone reports on 8/18/98 attempted phone call twice to OEPA-EMG and they received a message that the number was outside of the area and the call could not be made.

(5) **Date Reported:** 8/18/98 and 8/19/98.

(6) **Released Material:** Waste ammonia liquor, Profile BG1526. Waste codes were D003, D007, D018, and D038.

(7) **Amount Released:** Approximately 55 gallons to the soil.

(8) **Location of Release:** The line was overhead of the van trailer. When the line ruptured, the material spilled onto the trailer roof, flowed along the top of the roof, onto the pavement, then onto the soil, east of driveway entrance to the sampling bay.

(9) **Source of Release:** Broken unloading line.

(10) **How was Release Stopped:** Unloading was stopped immediately.

(11) **Cause of Release:** Unloading line damaged when hit with van trailer. Trailer was positioned too high on the motor vehicle.

(12) **Description of Response Actions Taken or Planned:** Facility responded immediately. Front end loader was used to build a dike to protect a drinking water well that was nearby. Applied lime and oil dry to area. Approximately 20 yards of soil and adsorbent material was removed and will be properly disposed of. A section of pipe less than 2 feet was replaced. The line was pressure tested and returned to service.

(13) **Estimated Quantity and Disposition of Recovered Material that Result from the Incident:** Approximately 400 gallons of waste from the line and the containment area was collected and transferred into the facility's onsite Integrated Aqueous Waste Treatment System. Approximately 20 yards of soil was collected and transferred to a rolloff box which will be properly disposed of.

(14) **Description of monitoring or sampling:** Clean up continued until there was no visible evidence of contamination and there was no noticeable ammonia odor.

(15) **Assessment of actual or potential hazards to human health or the environment:** The potential hazard to human health and the environment was mitigated at time the release was discovered. The spill was contained and the soil was cleaned up.

(16) **Extent of injuries:** There were no injuries.

(17) **Likely route of migration of the release:** The material did not migrate beyond the area immediately to the east of the pavement. A dike was immediately constructed with soil to contain the material that went from the top of the van trailer to the pavement then to the soil. In addition, the facility has in place an extensive surface water management system through which surface water runon and runoff are controlled by a series of ditches and culverts inter-connected by 31 slide gates. By use of the slide gates, any spill on site can be isolated, thereby preventing off-site migration and facilitating cleanup.

(18) **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

(19) **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, approximately 10 feet to the southeast. As stated previously, a dike was constructed from the surrounding soil to protect the well. The depth of the potable well is approximately 70 feet. The nearest surface water is Meyers Ditch. The distance to Meyers Ditch from the area is approximately 300 yards. Meyers Ditch is separated from the release area by a series of ditches, dikes and surface water management gates and a roadway. Because the spill was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

Form Completed By: Sandra L. Clark
Environmental Technician

Waste Management of Ohio, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 19, 1998

Ohio Environmental Protection Agency (P 130 072 326)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 130 072 327)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Waste Management of Ohio, Inc. - Vickery
Incident Report/Contingency Plan Report
Tank System Release Report

Dear Sirs:

On June 15, 1998, Waste Management of Ohio, Inc. - Vickery (WMO) experienced a release from a portion of its tank system. Enclosed please find a copy of the spill and contingency plan report which is being submitted in accordance with Part B Permit Condition B.30 and OAC 3745-54-56(J) and the tank system release report which is being submitted in accordance with Part B Permit Condition D.8(b) and OAC 3745-55-96(D)(3). The attached document describes the incident, our response actions, actions taken to prevent further release, clean up procedures followed, and repairs made to the system.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that

qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

WASTE MANAGEMENT OF OHIO, INC.

F.G. Nicar
General Manager

FGN/slc

Attachment

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Spill/Contingency Plan Report and Tank System Release Report
Incident #20

(1) **Owner/Operator Name:** Waste Management of Ohio, Inc.
Address: 17250 Newburgh Road Suite #100
Livonia, MI 48152-2618
Telephone Number: 313-462-6900

(2) **Name of Facility:** Waste Management of Ohio, Inc.
Address: 3956 State Route 412
Vickery, OH 43464
Telephone Number: 419-547-7791

(3) **Date of Release:** June 15, 1998
Time of Release: 3:20 pm.
Type of Incident: A drain line on a transfer line was accidently broken off by lawn mowing equipment. The line had been drained; however, there was still some waste in low lying areas in the pipeline. Waste ammonia liquor was spilled onto the ground.
Weather Conditions: Approximately 80 degrees F. No precipitation.

(4) **Reported to:** **OEPA-NWDO**, 3:26 pm - Ms. Beth Ames; **OEPA-EMG** - 3:30 pm - Greg Lauck, Report #9806-72-2396; **National Response Center** - 3:35 pm - Winters #441702. **OEPA Onsite Inspector** - 3:22 pm - Dave Schilt.

(5) **Date Reported:** June 15, 1998.

(6) **Released Material:** Waste ammonia liquor from Tank T-5. Possible waste codes are D002, D006, D007, D008, D010, D018, D038, and F006.

(7) **Amount Released:** Approximately 10 gallons.

(8) **Location of Release:** On ground underneath Well #4 transfer line at a location on the transfer line approximately 20 feet to the northeast of the Operations Lunchroom.

(9) **Source of Release:** Transfer line.

(10) **How was Release Stopped:** Container was immediately placed under drain line until a cap could be obtained. Drain line was capped. Vacuum truck was connected to line to drain any material that may have been left in the line. The line had been drained the previous week.

(11) **Cause of Release:** Drain line broken off when hit by lawn mowing equipment.

(12) **Description of Response Actions Taken or Planned:** Facility responded immediately to release as they were in the Operations Lunchroom which is approximately 20 feet from the area when the drain line was broken. Approximately 1,240 pounds of soil has been removed and will be properly disposed of. The drain line was removed. A section of pipe less than 2 feet was replaced. The line has been pressure tested and returned to service.

(13) **Estimated Quantity and Disposition of Recovered Material that Result from the Incident:** Approximately 10 gallons of waste from the line was collected and transferred into the facility's onsite Integrated Aqueous Waste Treatment System. Approximately 1,240 pounds of soil was collected and transferred to a rolloff box which will be sent for disposal to an offsite disposal facility.

(14) **Description of monitoring or sampling:** Clean up continued until there was no visible evidence of contamination and there was no noticeable ammonia odor. The facility will continue to check the area for the next few days to assure there is no further evidence of contamination. Three soil samples were taken on 6/15/98, one on the east side of the clean up area, one on the west side, and one upgradient. The facility reviewed analytical data from a sample taken of the waste that had last past through the transfer line. There were no key indicator parameters that the soil could be monitored for. Because the release was immediately responded to and because there are no key indicator parameters known; visual inspection will be the determining factor to assure the area is adequately remediated.

(15) **Assessment of actual or potential hazards to human health or the environment:** The potential hazard to human health and the environment was mitigated at time the release was discovered. The spill was contained and the soil was cleaned up.

(16) **Extent of injuries:** There were no injuries.

(17) **Likely route of migration of the release:** The material did not migrate beyond the area immediately below the transfer line. The facility has in place an extensive surface water management system through which surface water runon and runoff are controlled by a series of ditches and culverts inter-connected by 31 slide gates. By use of the slide gates, any spill on site can be isolated, thereby preventing off-site migration and facilitating cleanup.

(18) **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

(19) **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, approximately 400 yards to the northwest. The potable well is separated from the release area by a series of ditches and dikes associated with surface water management areas A, B, C and E. The depth of the potable well is approximately 70 feet. There is an aboveground tank which contains drinking water that is approximately 15 feet to the southwest. The nearest surface water is Little Racoon Creek. The distance to Little Raccoon Creek from the area is approximately 1,000 yards. Little Raccoon Creek is separated from the release area by a series of ditches, dikes and surface water management gates and a roadway. Because the spill was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

Form Completed By: Sandra L. Clark
, Environmental Manager

Chemical Waste Management, Inc.

3956 State Route 412 • Vickery, Ohio 43464 • 419-547-7791 • Fax: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

December 16, 1997

Ohio Environmental Protection Agency (P 311 952 205)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 311 952 206)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Incident Report/Contingency Plan Report
Tank System Release Report

Dear Sirs:

On December 13, 1997, Chemical Waste Management, Inc. (CWM), Vickery experienced a release from a portion of its tank system. Enclosed please find a copy of the spill and contingency plan report which is being submitted in accordance with Part B Permit Condition B.30 and OAC 3745-54-56(J) and the tank system release report which is being submitted in accordance with Part B Permit Condition D.8(b) and OAC 3745-55-96(D)(3). The attached document describes the incident, our response actions, actions taken to prevent further release, clean up procedures followed, and repairs made to the system.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that

qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/slc

Attachment

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Spill/Contingency Plan Report and Tank System Release Report

Incident #78

(1) **Owner/Operator Name:** CWM Holdings, Inc.
Address: 3003 Butterfield Road
Oak Brook, IL 60521
Telephone Number: 708-218-1500

(2) **Name of Facility:** Chemical Waste Management, Inc.
Address: 3956 State Route 412
Vickery, OH 43464
Telephone Number: 419-547-7791

(3) **Date of Release:** December 13, 1997
Time of Release: Discovered at 10:20 am.
Type of Incident: Release of chromic acid onto soil through crack in transfer line.
Weather Conditions: Winds southwest. Approximately 30 degrees F. No precipitation.

(4) **Reported to:** **OEPA-NWDO**, 10:27 am - Office closed. Recording directed caller to OEPA-EMG; **OEPA-EMG** - 10:30 am. Received return call at 10:50 am from Marquetta Cain, Report #9712-72-4811; **National Response Center** - 10:35 am - Mason #415597. **OEPA Onsite Inspector** - 10:40 am - Dave Schilt - Left message on machine.

(5) **Date Reported:** December 13, 1997.

(6) **Released Material:** Waste chromic acid. Waste codes D002, D007 and D008.

(7) **Amount Released:** Approximately 5 gallons.

(8) **Location of Release:** On the ground underneath the transfer pipelines northeast of the V-Tank building.

(9) **Source of Release:** Transfer line.

(10) **How was Release Stopped:** Transfer line was drained.

(11) **Cause of Release:** Fiberglass-reinforced plastic transfer line cracked and released material.

(12) **Description of Response Actions Taken or Planned:** Soil was treated with lime and excavated. The section of pipeline that failed was replaced and pressure tested prior to returning to service. Surface water management gate C-4 is currently in the closed position. A section of the pipeline removed is being sent to the manufacturer for further review.

(13) **Estimated Quantity and Disposition of Recovered Material that Result from the Incident:** Approximately 1,500 pounds of soil was excavated, placed in rolloff box #249443 and will be properly disposed of.

(14) **Description of monitoring or sampling:** Excavation continued until there was no visible evidence of contamination The pH of the soil was checked with pH paper during excavation in areas of concern. No additional sampling is planned due to the small quantity spilled and the large amount of soil that was excavated.

(15) **Assessment of actual or potential hazards to human health or the environment:** The potential hazard to human health and the environment was mitigated at time the release was discovered. The spill was contained and the contaminated soil was excavated and will be properly disposed of.

(16) **Extent of injuries:** There were no injuries.

(17) **Likely route of migration of the release:** The material did not migrate beyond the soil immediately below the unloading lines. The facility has in place an extensive surface water management system through which surface water runon and runoff are controlled by a series of ditches and culverts inter-connected by 31 slide gates. By us of the slide gates, any spill on site can be isolated, thereby preventing off-site migration and facilitating cleanup.

(18) **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

(19) **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, approximately 200 feet to the south. The potable well is separated from the release area by dikes associated with surface water management area B and C and by the V-Tank building. The depth of the potable well is approximately 70 feet. The nearest surface water is Meyers Ditch. The distance to Meyers Ditch from the area is approximately 300 yards. Meyers Ditch is separated from the release area by a series of ditches, dikes and surface water management gates. Because of the spill was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

Form Completed By: Sandra L. Clark
Environmental Manager

Chemical Waste Management, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 24, 1997

Ohio Environmental Protection Agency (P 311 952 231)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 311 952 232)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Tank System Release Report

Dear Sirs:

On September 29, 1997, Chemical Waste Management, Inc. (CWM), Vickery experienced a release from a portion of its tank system. CWM submitted the Contingency Plan Report to the Agency on 10/2/97. Enclosed please find a copy of the tank system release report which is being submitted as in accordance with Part B Permit Condition D.8(b) and OAC 3745-55-96(D)(3).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/slc

Attachments

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Tank System Release Report

Incident #66

1. **Date of Release:** September 29, 1997

2. **Summary of Incident:** See Attachment A for copy of Incident Report/Contingency Plan Report.

3. **Likely route of migration of the release:** Because of high winds out of the south, some of the foam was carried to the area to the north and northeast of the containment. The foam was light in weight and most of it was on the above ground pipelines and the grass around the pipe lines.

4. **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

   Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

   Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

   Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

   Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

5. **Description of monitoring or sampling:** On 9/30/97, a sample of the foam was taken and analyzed for pH. The result was 4.0. It was also screened for cyanides and the result was negative. The sample was further analyzed for eight RCRA metals and zinc. On 10/1/97, following excavation, four soil samples (66-1 to 66-4) were taken north of the T-Tank containment. These samples were analyzed for Total Chromium based on the results from the foam sample. The results ranged from 10 mg/kg to 14 mg/kg which is less than half of the closure plan level of 35.29 mg/kg for soil. The area is considered clean and no further actions are planned. The results and a sketch of the sample locations are included as Attachment B.

6. **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, approximately 500 feet to the southwest. The potable well is separated from the release area by dikes associated with surface water management areas B and C. The depth of the potable well is approximately 70 feet. The nearest surface water is Meyers Ditch. The distance to Meyers Ditch from the area is approximately 600 yards. Meyers Ditch is separated from the release area by a series of ditches, dikes and surface water management gates. Because of the spill was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

7. **Description of response actions taken or planned:** The unloading operations were stopped immediately. The above ground pipelines were wiped down with soap and water to remove the visible foam. The grass was cut or thatched and removed. The top soil in the areas affected was removed. Approximately 30 yards of grass and soil was removed and transferred to rolloff boxes and will be properly disposed of. The waste that was in the containment was removed. The area was temporarily diked and surface water management gate B-3 was closed until the clean up was complete.

   The facility is currently having the outside of the tanks and associated piping within the containment cleaned. This portion of the clean up was delayed due to the concern that high winds would carry the materials outside the containment area.

Form Completed By: Sandra L. Clark
Environmental Manager

ATTACHMENT A

REPORT DATED OCTOBER 2, 1997

Chemical Waste Management, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 2, 1997

Ohio Environmental Protection Agency (P 602 174 501)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 602 174 502)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Incident Report/Contingency Plan Report

Dear Sirs:

On September 29, 1997, Chemical Waste Management, Inc. (CWM), Vickery experienced a release from a portion of its tank system. Enclosed please find a copy of the spill and contingency plan report which is being submitted in accordance with Part B Permit Condition B.30 and OAC 3745-54-56(J). The attached document describes the incident, our response actions, actions taken to prevent further release, clean up procedures followed, and repairs made to the system.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my

knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/SLC/tr

Attachments

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Spill/Contingency Plan Report

Incident #66

(1) Owner/Operator Name: CWM Holdings, Inc.
Address: 3003 Butterfield Road
Oak Brook, IL 60521
Telephone Number: 708-218-1500

(2) Name of Facility: Chemical Waste Management, Inc.
Address: 3956 State Route 412
Vickery, OH 43464
Telephone Number: 419-547-7791

(3) Date of Release: September 29, 1997
Time of Release: Approximately 1:20 pm, for 10-15 minutes.
Type of Incident: Release of foam from waste acid Tank T-1 from pressure relief valve. The foam flowed down the side of the tank. In addition, due to high winds, the foam was blown onto another tank within the containment, outside of the containment onto the grass and onto the above ground pipelines north of the containment.
Weather Conditions: Winds ranging from 25-45 mph from the south. Approximately 70 degrees F. No precipitation.

(4) Reported to: 9/29/97: **OEPA Onsite Inspector** - 1:45 pm - Dave Schilt; **OEPA-EMG** - 1:57 pm - Jody Green, Report #9709-72-3982; **OEPA-NWDO**, 2:09 pm - Chuck Hull; **National Response Center** - 2:10 pm - Mason #405495.

(5) Date Reported: September 29, 1997.

(6) Released Material: Foam from a waste acid tank.

(7) Amount Released: Approximately 20 gallons.

(8) Location of Release: On the grass and above ground pipelines north of the T-Tank containment.

(9) Source of Release: Foam produced following the unloading of an alkaline stream and the tanker rinse water into a waste acid tank.

(10) **How was Release Stopped:** Unloading operations were stopped immediately. The reaction completed and the pressure dissipated. The tank foamed for approximately 10 to 15 minutes.

(11) **Cause of Release:** Alkaline material apparently reacted with acidic material in tank, producing a gas which filled the headspace in the tank with foam.

(12) **Description of Response Actions Taken or Planned:** The unloading operations were stopped immediately. The above ground pipelines were wiped down with soap and water to remove the visible foam. The grass was cut or thatched and removed. The top soil in the areas affected was removed. Approximately 40 yards of grass and soil was removed and transferred to rolloff boxes and will be properly disposed of. The waste that was in the containment was removed. The cleaning of the outside of the tanks was delayed due to the concern that high winds would carry the materials outside the containment area. The facility plans to wash down the outside of the tanks and associated piping within the containment, collect the material and dispose of it through the Integrated Aqueous Waste Treatment System to the one of the onsite injection wells.

(13) **Description of monitoring or sampling:** A sample of the foam was taken on 9/30/97. The pH was 4.0 by meter. It was also screened for cyanides and the result was negative. The sample was sent to an offsite laboratory for analysis for RCRA metals. At the completion of excavation, soil samples were taken and will be analyzed based upon the results of the foam sample analysis. The results will be submitted under separate cover.

(14) **Assessment of actual or potential hazards to human health or the environment:** The potential hazard to human health and the environment was mitigated at time the release was discovered. The spill was contained and the contaminated grass and potentially contaminated soil was excavated and will be properly disposed of.

(15) **Extent of injuries:** There were no injuries.

Form Completed By: Sandra L. Clark
Environmental Manager

ATTACHMENT B

FOAM SAMPLE RESULTS
SKETCH OF SAMPLES AND SAMPLE RESULTS
FOR 10/1/97 SAMPLING

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Lab

Report Date: *07-Oct-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-26333
Date Logged-In: 10/3/97
Matrix: Soil/Sludge
Project #:

Your Sample ID: 9709163-INCIDENT #66 FOAM
Sample Source: RCRA
Client Project #:
PO#:
Date Submitted to Lab: 10/2/97

- COLLECTION INFORMATION -

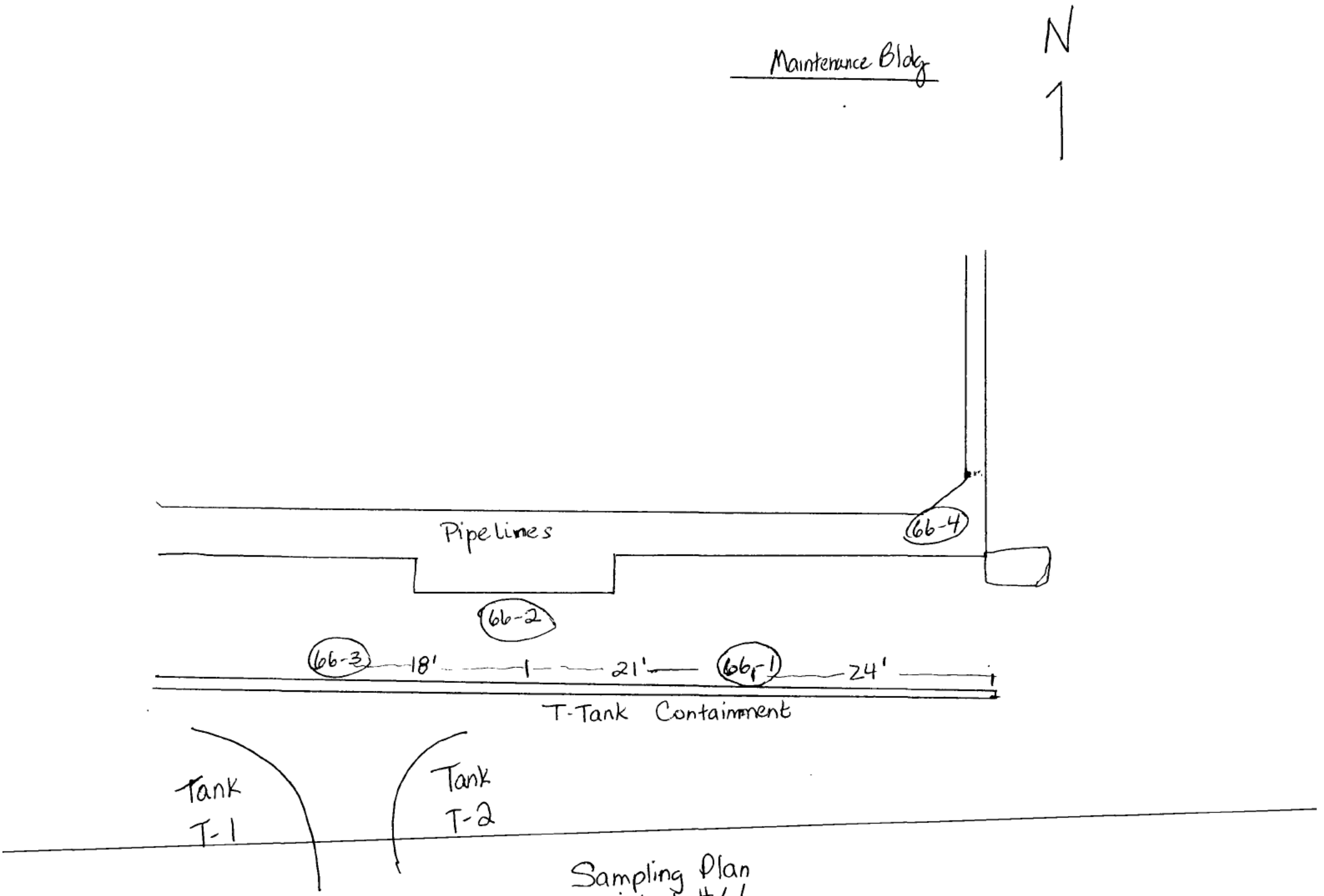
Date/Time/By: 9/30/97 3:00 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	61	PPM	10/3/97	BLD	5701
BA-ICP-S	200.7/6010	Barium, Ba	53	PPM	10/3/97	ROH	5686
CD-ICP-S	200.7/6010	Cadmium, Cd	17	PPM	10/3/97	ROH	5686
CR-ICP-S	200.7/6010	Chromium, Cr	1130	PPM	10/3/97	ROH	5686
PB-ICP-S	200.7/6010	Lead, Pb	40	PPM	10/3/97	ROH	5686
HG-S	245.1/7471	Mercury, Hg	5.31	PPM	10/2/97	ROH	5675
SE-GFAA-S	3113B/7740	Selenium, Se	< 12	PPM	10/5/97	BLD	5695
AG-ICP-S	200.7/6010	Silver, Ag	< 9	PPM	10/3/97	ROH	5686
TS-%	160.3	Residue, Total, TS	17.9	%	10/3/97	TLC	5663
ZN-ICP-S	6010	Zinc, Zn	17600	PPM	10/3/97	ROH	5686

End of Report

Report Approved By: Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481



Sampling Plan
Incident #66
10-1-97

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: *16-Oct-97*

Phone: (419) 547-7791 **Ext:**

Attn: Sandy Clark

FAX: (419) 547-6144

Our Lab #: MAR97-27076 **Your Sample ID:** 9709215 66-1
Date Logged-In: 10/10/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:** VKLAB23
Project #: **Date Submitted to Lab:** 10/9/97

- COLLECTION INFORMATION -

Date/Time/By: 10/1/97 2:30 PM MONEGHIN

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP-S	6010	Chromium, Cr	13	MG/KG	10/13/97	RCB	5811
TS-%	160.3	Residue, Total, TS	77.0	%	10/12/97	TLC	5773

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039
Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: *16-Oct-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Attn: Sandy Clark

Our Lab #: MAR97-27077
Date Logged-In: 10/10/97
Matrix: Soil/Sludge
Project #:

Your Sample ID: 9709215 66-2
Sample Source: RCRA
Client Project #:
Date Submitted to Lab: 10/9/97

PO#: VKLAB23

- COLLECTION INFORMATION -

Date/Time/By: 10/1/97 2:30 PM MONEGHIN

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP-S	6010	Chromium, Cr	14	MG/KG	10/13/97	RCB	5811
TS-%	160.3	Residue, Total, TS	75.3	%	10/12/97	TLC	5773

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: *17-Oct-97*

Phone: (419) 547-7791 **Ext:**

Attn: Sandy Clark

FAX: (419) 547-6144

Our Lab #: MAR97-27078 **Your Sample ID:** 9709215 66-3
Date Logged-In: 10/10/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:** VKLAB23
Project #: **Date Submitted to Lab:** 10/9/97

- COLLECTION INFORMATION -

Date/Time/By: 10/1/97 2:30 PM MONEGHIN

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP-S	6010	Chromium, Cr	10	MG/KG	10/13/97	RCB	5811
TS-%	160.3	Residue, Total, TS	79.2	%	10/12/97	TLC	5773

End of Report

Report Approved By: Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Sandy Clark

Report Date: *16-Oct-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-27079
Date Logged-In: 10/10/97
Matrix: Soil/Sludge
Project #:

Your Sample ID: 9709215 66-4
Sample Source: RCRA
Client Project #:
Date Submitted to Lab: 10/9/97

PO#: VKLAB23

- COLLECTION INFORMATION -

Date/Time/By: 10/1/97 2:30 PM MONEGHIN

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP-S	6010	Chromium, Cr	10	MG/KG	10/13/97	RCB	5811
TS-%	160.3	Residue, Total, TS	71.0	%	10/12/97	TLC	5773

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

Chemical Waste Management, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 23, 1997

Ohio Environmental Protection Agency (P 311 952 229)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 311 952 230)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Tank System Release Report

Dear Sirs:

On September 25, 1997, Chemical Waste Management, Inc. (CWM), Vickery experienced a release from a portion of its tank system. CWM submitted the Contingency Plan Report to the Agency on 9/30/97. Enclosed please find a copy of the tank system release report which is being submitted as in accordance with Part B Permit Condition D.8(b) and OAC 3745-55-96(D)(3).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/slc

Attachments

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Tank System Release Report

Incident #64

1. **Date of Release:** September 25, 1997

2. **Summary of Incident** - See Attachment A for copy of Incident Report/Contingency Plan Report.

3. **Likely route of migration of the release:** The release migrated behind Filter Building #1, between the building and the concrete containment, and then migrated approximately 60 feet to the west of the building. The release was contained in that area. Surface water management gate C-4 was closed and remained closed until clean up was complete. Temporary diking was put in place to assure no further migration.

4. **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

   Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

   Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

   Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

   Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

5. **Results of monitoring or sampling:** On 9/25/97, following clean up and soil excavation, eight soil samples (#1-#8) were taken west of the filter building and three soil samples (#9-#11) were taken between the building and the concrete containment. These samples were analyzed for RCRA metals.

Following receipt of the above results, additional excavation took place in the area of sample #4 and #6 and behind the building. On 10/6/97, one additional soil sample (#12) was taken to the west of the building and two (#13-#14) were taken behind the building.

The additional sample results were reviewed. The results from the sample taken west of the building were below the facility's closure plan levels. However, the two samples taken behind the building were still above closure plan levels. The pH of rainwater in the area behind the building was found to be neutral. Approximately 4 inches of soil was removed in that area. It has been determined that the clean up from Incident #64 is complete.

Filter Building #1 is included in the RCRA Facility Investigation (RFI) under Solid Waste Management Unit (SWMU) Group G as SWMU#27. CWM will include the area between Filter Building #1 and the containment as an area to be sampled and reviewed in the RFI.

CWM reviewed the response actions, sampling and monitoring, and clean up with the OEPA onsite inspector throughout the clean up process.

Included in Attachment B and C are analytical data from the sampling that took place on 9/25/97 and 10/6/97, respectively, and a sketch of the sampling locations.

6. **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, approximately 200 feet to the southwest. The potable well is separated from the release area by dikes and ditches associated with surface water management area C-4. The depth of the potable well is approximately 70 feet. The nearest surface water is Meyers Ditch. The distance to Meyers Ditch from the area is approximately 500 yards. Meyers Ditch is separated from the release area by a series of ditches, dikes and surface water management gates. Because of the spill was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

7. **Description of response actions taken:** Field personnel had been in Filter Building #1 approximately 10 to 15 minutes prior to the incident and there were no problems. At approximately 3:08 am, the supervisor noticed that the tank that the material was to be transferring to was loosing level and requested that the field operator return to the building. At 3:10 am, the field personnel returned to the filter building and determined that the admix line was broken at the check valve. The transfer of material was stopped immediately. The waste that was contained in the building was removed by a vacuum truck and disposed of through the deepwell injection system. Any free liquid on the soil was removed by vacuum truck. Lime was placed on the soil and the soil was excavated. Approximately 60 yards of material was excavated and transferred to rolloff boxes and will be properly disposed of. Surface water just beyond the spill area was checked with pH paper and was found to be neutral.

   The following additional actions have been taken or are planned:

   a. The admix line has been repaired.
   b. The bracing of the line has been changed.
   d. A swing- check valve has been installed in place of the ball-check valve.
   e. The admix feed pump relief valve setting has been recalibrated.
   f. A dampener has been installed on the discharge line of the admix feed pump.
   g. An alarm is being installed in the sump within the building which will signal to the Control Room.

Form Completed By: Sandra L. Clark
Environmental Manager

ATTACHMENT A

REPORT DATED SEPTEMBER 30, 1997

Chemical Waste Management, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

September 30, 1997

Ohio Environmental Protection Agency (P 602 174 499)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 602 174 500)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Incident Report/Contingency Plan Report

Dear Sirs:

On September 25, 1997, Chemical Waste Management, Inc. (CWM), Vickery experienced a release from a portion of its tank system. Enclosed please find a copy of the spill and contingency plan report which is being submitted in accordance with Part B Permit Condition B.30 and OAC 3745-54-56(J). The attached document describes the incident, our response actions, actions taken to prevent further release, clean up procedures followed, and repairs made to the system.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my

knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/SLC/tr

Attachments

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Spill/Contingency Plan Report

Incident #64

(1) Owner/Operator Name: CWM Holdings, Inc.
Address: 3003 Butterfield Road
Oak Brook, IL 60521
Telephone Number: 708-218-1500

(2) Name of Facility: Chemical Waste Management, Inc.
Address: 3956 State Route 412
Vickery, OH 43464
Telephone Number: 419-547-7791

(3) Date of Release: September 25, 1997
Time of Release: Discovered at 3:10 am.
Type of Incident: Release of waste mixed acid outside the containment building.
Weather Conditions: Night time. Approximately 45 degrees F. No precipitation.

(4) Reported to: 9/25/97: OEPA-NWDO, 5:00 am - Left message on answering machine; OEPA-EMG, 5:00 am - Dispatcher Maple, Report #9709-72-3926, Chris Holmes of OEPA-EMG returned call at 5:25 am; OEPA Onsite Inspector - 5:00 am - Left message on machine; 9/29/97: National Response Center - 11:00 am - Moorhouse #405439. Ohio EPA Onsite Inspector, - 10:00 am - Reviewed incident and inspected clean up area with Dave Schilt.

(5) Date Reported: September 25, 1997 and September 29, 1997.

(6) Released Material: Spent mixed acids.

(7) Amount Released: Approximately 100 gallons.

(8) Location of Release: South side of Filter Building #1. Waste flowed west along the back of the building and then north/northwest.

(9) Source of Release: Product line broke at check valve which allowed waste to flow backwards through the broken line.

(10) How was Release Stopped: Transfer of material was stopped immediately.

(11) Cause of Release: Line broke at the check valve. Waste from the filterpress drained backwards through the broken line.

(12) Description of Response Actions Taken or Planned: The transfer of material was stopped immediately. The waste that was contained in the building was removed by a vacuum truck and disposed of through the deepwell injection system. Lime was placed on the soil and the soil was evacuated. Approximately 50 yards of material was excavated and transferred to rolloff boxes and will be properly disposed of.

(13) Description of monitoring or sampling: At the completion of excavation, soil samples were taken and are being analyzed for RCRA Metals. The results will be submitted under separate cover. Surface water beyond the spill area was checked with pH paper and was found to be neutral.

(14) Assessment of actual or potential hazards to human health or the environment: The potential hazard to human health and the environment was mitigated at time the release was discovered. The spill was contained and the contaminated soil neutralized and excavated and will be properly disposed of.

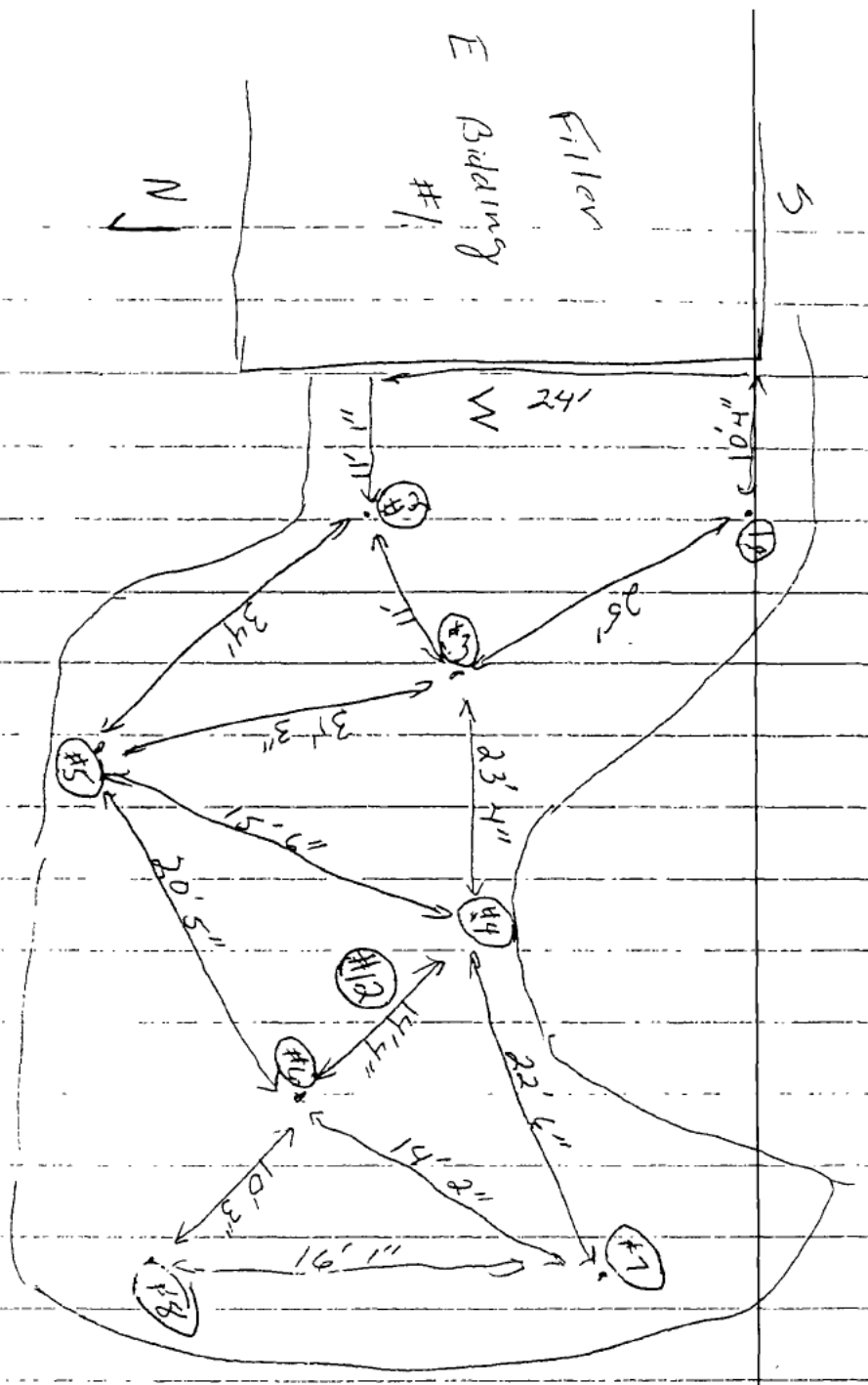
(15) Extent of injuries: There were no injuries.

Form Completed By: Sandra L. Clark
Environmental Manager

ATTACHMENT B

SKETCH OF SAMPLES AND SAMPLE RESULTS
FOR 9/25/97 AND 10/6/97 SAMPLING

WEST OF FILTER BUILDING



INCIDENT #64 SAMPLES

Sample #1 to #8: Taken 9/25/97 at 11:30 am.

Sample #12: Taken 10/6/97 at 11:40 am after additional excavation had taken place in the area where sample #4 and #6 were taken.

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Chris Hines

Report Date: 29-Sep-97

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-25640 **Your Sample ID:** 9709021-1
Date Logged-In: 9/26/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	7	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	69	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 1.48	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	14	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	11	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	0.03	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 2.3	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 1	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	84.3	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson

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1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039 **Report Date:** 29-Sep-97

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Phone: (419) 547-7791 **Ext:**

Attn: Chris Hines **FAX:** (419) 547-6144

Our Lab #: MAR97-25641 **Your Sample ID:** 9709021-2
Date Logged-In: 9/26/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	10	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	96	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 1.95	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	18	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	14	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	0.05	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 1.9	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 2	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	83.9	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039 **Report Date:** 29-Sep-97

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Phone: (419) 547-7791 **Ext:**

Attn: Chris Hines **FAX:** (419) 547-6144

Our Lab #: MAR97-25642 **Your Sample ID:** 9709021-3
Date Logged-In: 9/26/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	9	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	91	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 1.34	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	29	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	17	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	0.06	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 1.8	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 1	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	77.0	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039 **Report Date:** 29-Sep-97

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Attn: Chris Hines

Our Lab #: MAR97-25643 **Your Sample ID:** 9709021-4
Date Logged-In: 9/26/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	7	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	124	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 1.47	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	19	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	20	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	0.07	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 2.6	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 1	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	83.2	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: 29-Sep-97

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Attn: Chris Hines

Our Lab #: MAR97-25644 **Your Sample ID:** 9709021-5
Date Logged-In: 9/26/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	8	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	99	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 1.96	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	19	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	14	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	< 0.03	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 1.9	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 2	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	84.3	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039 **Report Date:** 29-Sep-97

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Phone: (419) 547-7791 **Ext:**

Attn: Chris Hines **FAX:** (419) 547-6144

Our Lab #: MAR97-25645 **Your Sample ID:** 9709021-6
Date Logged-In: 9/26/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	7	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	72	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 0.80	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	58	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	18	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	< 0.04	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 1.7	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 2	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	79.9	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

OCT 3 1997
VICKERY

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Chris Hines

Report Date: *29-Sep-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-25646 **Your Sample ID:** 9709021-7
Date Logged-In: 9/26/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	9	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	69	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 1.0	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	20	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	17	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	0.05	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 2.1	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 2	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	75.3	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson

OCT 03 1997
VICKERY

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PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039
Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: 29-Sep-97

Attn: Chris Hines

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-25647
Your Sample ID: 9709021-8
Date Logged-In: 9/26/97
Sample Source: RCRA
Matrix: Soil/Sludge
Client Project #:
PO#:
Project #:
Date Submitted to Lab: 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 11:30 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	8	MG/KG	9/26/97	BLD	5582
BA-ICP-S	200.7/6010	Barium, Ba	94	MG/KG	9/26/97	SMM	5575
CD-ICP-S	200.7/6010	Cadmium, Cd	< 1.0	MG/KG	9/26/97	SMM	5575
CR-ICP-S	200.7/6010	Chromium, Cr	23	MG/KG	9/26/97	SMM	5575
PB-ICP-S	200.7/6010	Lead, Pb	14	MG/KG	9/26/97	SMM	5575
HG-S	245.1/7471	Mercury, Hg	0.04	MG/KG	9/26/97	RCB	5578
SE-GFAA-S	3113B/7740	Selenium, Se	< 2.5	MG/KG	9/26/97	BLD	5576
AG-ICP-S	200.7/6010	Silver, Ag	< 2	MG/KG	9/26/97	SMM	5575
TS-%	160.3	Residue, Total, TS	84.0	%	9/25/97	TLC	5581

End of Report

Report Approved By: Deborah K. Johnson
Deborah K. Johnson

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OCT 03 1997
VICKERY

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PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Sandy Clark

Report Date: *16-Oct-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-27080
Date Logged-In: 10/10/97
Matrix: Soil/Sludge
Project #:

Your Sample ID: 9709349 #12
Sample Source: RCRA
Client Project #:
Date Submitted to Lab: 10/9/97

PO#: VKLAB23

- COLLECTION INFORMATION -

Date/Time/By: 10/6/97 11:40 AM MONEGHIN

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP-S	6010	Chromium, Cr	15	MG/KG	10/13/97	RCB	5811
TS-%	160.3	Residue, Total, TS	84.9	%	10/12/97	TLC	5773
PB-ICP-S	6010	Lead, Pb	13	MG/KG	10/13/97	RCB	5811

End of Report

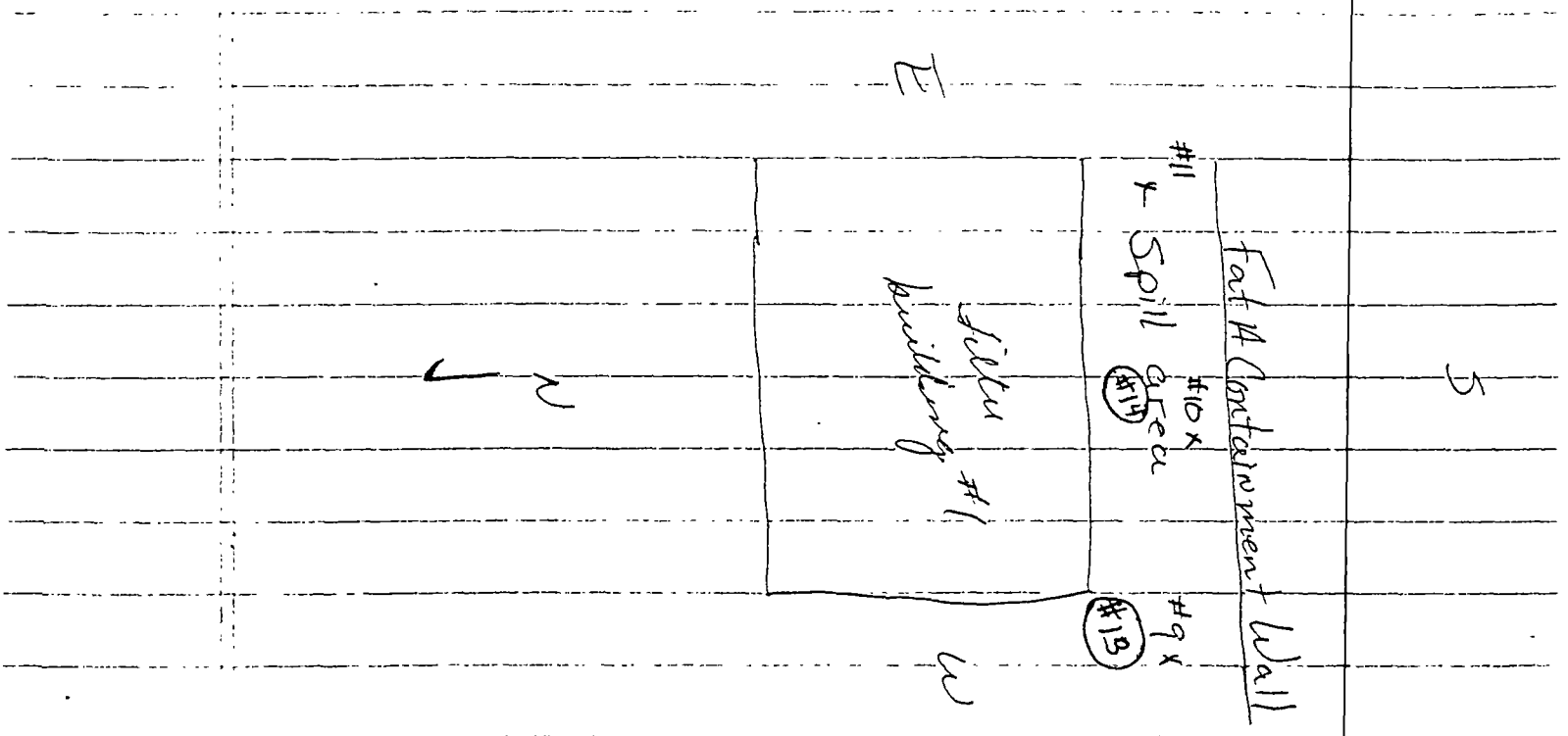
Report Approved By: Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATTACHMENT C

SKETCH OF SAMPLES AND SAMPLE RESULTS
FOR 9/25/97 AND 10/6/97 SAMPLING

SOUTH AND SOUTH WEST OF FILTER BUILDING



INCIDENT #64 SAMPLES

Sample #9 to #11: Taken 9/25/97 at 2:05 pm.

Sample #13 to #14: Taken 10/6/97 at 11:40 am after additional excavation had taken place in the area behind the filter building.

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: 10039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Chris Hines

Report Date: *02-Oct-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-25777 **Your Sample ID:** 9709028-9
Date Logged-In: 9/30/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:** VKLAB19
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 2:05 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	9	MG/KG	10/1/97	RCB	5644
BA-ICP-S	200.7/6010	Barium, Ba	330	MG/KG	10/1/97	SMM	5647
CD-ICP-S	200.7/6010	Cadmium, Cd	1.3	MG/KG	10/1/97	SMM	5647
CR-ICP-S	200.7/6010	Chromium, Cr	33	MG/KG	10/1/97	SMM	5647
PB-ICP-S	200.7/6010	Lead, Pb	44	MG/KG	10/1/97	SMM	5647
HG-S	245.1/7471	Mercury, Hg	0.34	MG/KG	9/30/97	BLD	5619
SE-GFAA-S	3113B/7740	Selenium, Se	<3.6	MG/KG	10/2/97	BLD	5660
AG-ICP-S	200.7/6010	Silver, Ag	<2	MG/KG	10/1/97	SMM	5647
TS-%	160.3	Residue, Total, TS	81.2	%	9/30/97	TLC	5602

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039 **Report Date:** *02-Oct-97*

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464 **Phone:** (419) 547-7791 **Ext:**

Attn: Chris Hines **FAX:** (419) 547-6144

Our Lab #: MAR97-25778 **Your Sample ID:** 9709028-10
Date Logged-In: 9/30/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:** VKLAB19
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 2:05 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	8	MG/KG	10/1/97	RCB	5644
BA-ICP-S	200.7/6010	Barium, Ba	55	MG/KG	10/1/97	SMM	5647
CD-ICP-S	200.7/6010	Cadmium, Cd	1.7	MG/KG	10/1/97	SMM	5647
CR-ICP-S	200.7/6010	Chromium, Cr	30	MG/KG	10/1/97	SMM	5647
PB-ICP-S	200.7/6010	Lead, Pb	12	MG/KG	10/1/97	SMM	5647
HG-S	245.1/7471	Mercury, Hg	0.11	MG/KG	9/30/97	BLD	5619
SE-GFAA-S	3113B/7740	Selenium, Se	< 2.3	MG/KG	10/2/97	BLD	5660
AG-ICP-S	200.7/6010	Silver, Ag	< 2	MG/KG	10/1/97	SMM	5647
TS-%	160.3	Residue, Total, TS	79.2	%	9/30/97	TLC	5602

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: 10039
Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: 02-Oct-97

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Attn: Chris Hines

Our Lab #: MAR97-25779 **Your Sample ID:** 9709028-11
Date Logged-In: 9/30/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:** VKLAB19
Project #: **Date Submitted to Lab:** 9/26/97

- COLLECTION INFORMATION -

Date/Time/By: 9/25/97 2:05 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AS-GFAA-S	3113B/7060	Arsenic, As	12	MG/KG	10/1/97	RCB	5644
BA-ICP-S	200.7/6010	Barium, Ba	180	MG/KG	10/1/97	SMM	5647
CD-ICP-S	200.7/6010	Cadmium, Cd	1.17	MG/KG	10/1/97	SMM	5647
CR-ICP-S	200.7/6010	Chromium, Cr	23	MG/KG	10/1/97	SMM	5647
PB-ICP-S	200.7/6010	Lead, Pb	27	MG/KG	10/1/97	SMM	5647
HG-S	245.1/7471	Mercury, Hg	0.29	MG/KG	9/30/97	BLD	5619
SE-GFAA-S	3113B/7740	Selenium, Se	< 1.9	MG/KG	10/2/97	BLD	5660
AG-ICP-S	200.7/6010	Silver, Ag	< 1	MG/KG	10/1/97	SMM	5647
TS-%	160.3	Residue, Total, TS	78.5	%	9/30/97	TLC	5602

End of Report

Report Approved By: Deborah K. Johnson
Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Sandy Clark

Report Date: *16-Oct-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-27081 **Your Sample ID:** 9709350 #13
Date Logged-In: 10/10/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:** VKLAB23
Project #: **Date Submitted to Lab:** 10/9/97

- COLLECTION INFORMATION -

Date/Time/By: 10/6/97 11:40 AM MONEGHIN

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP-S	6010	Chromium, Cr	81	MG/KG	10/13/97	RCB	5811
TS-%	160.3	Residue, Total, TS	81.2	%	10/12/97	TLC	5773
PB-ICP-S	6010	Lead, Pb	96	MG/KG	10/13/97	RCB	5811
BA-ICP-S	200.7/6010	Barium, Ba	447	MG/KG	10/13/97	RCB	5811
CD-ICP-S	6010	Cadmium, Cd	3	MG/KG	10/13/97	RCB	5811
HG-S	7471A	Mercury, Hg	0.55	MG/KG	10/14/97	SMM	5836

End of Report

Report Approved By: Deborah K. Johnson

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PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Sandy Clark

Report Date: *16-Oct-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-27082 **Your Sample ID:** 9709351 #14
Date Logged-In: 10/10/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:** VKLAB23
Project #: **Date Submitted to Lab:** 10/9/97

- COLLECTION INFORMATION -

Date/Time/By: 10/6/97 11:40 AM MONEGHIN

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP-S	6010	Chromium, Cr	28	MG/KG	10/13/97	RCB	5811
TS-%	160.3	Residue, Total, TS	78.8	%	10/12/97	TLC	5773
PB-ICP-S	6010	Lead, Pb	43	MG/KG	10/13/97	RCB	5811
BA-ICP-S	200.7/6010	Barium, Ba	273	MG/KG	10/13/97	RCB	5811
CD-ICP-S	6010	Cadmium, Cd	2	MG/KG	10/13/97	RCB	5811
HG-S	7471A	Mercury, Hg	0.34	MG/KG	10/14/97	SMM	5836

End of Report

Report Approved By: Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

Chemical Waste Management, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 12, 1997

Ohio Environmental Protection Agency (P 130 072 273)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 130 072 274)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Analytical Data for Tank System Release Report

Dear Sirs:

Enclosed you will find the analytical data from the water sample taken from the pit on 7/22/97. Following receipt of these sample results, the data was reviewed with the onsite inspector. Additional soil excavation of the area took place on 8/6/97. Three additional soil samples were taken - two along the west side of the pit and one surface sample at the southeast corner. These samples will be analyzed for Total Chromium and Total Lead. The results will be submitted after receipt.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my

knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/SLC/tr

Enclosures

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-Onsite Inspector

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: *12-Aug-97*

Phone: (419) 547-7791 **Ext:**

Attn: Chris Hines

FAX: (419) 547-6144

Our Lab #: MAR97-17446 **Your Sample ID:** 9707273 L-4
Date Logged-In: 7/28/97 **Sample Source:** Other/Undefined
Matrix: Water **Client Project #:** **PO#:** VKLAB06
Project #: **Date Submitted to Lab:** 7/28/97

- COLLECTION INFORMATION -

Date/Time/By: 7/22/97

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CR-ICP	200.7/6010	Chromium, Cr	2100	UG/L	7/30/97	RCB	4726

End of Report

Report Approved By: Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

Chemical Waste Management, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 24, 1997

Ohio Environmental Protection Agency (P 130 072.263)
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J (P 130 072 265)
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Analytical Data for Tank System Release Report

Dear Sirs:

On July 11, 1997, Chemical Waste Management, Inc. (CWM), Vickery submitted a tank system release report. As noted in Section 15 of that report, samples were taken of the water in the pit. Enclosed are the analytical results for those samples which were analyzed for Total Lead and Hexavalent Chromium. Enclosed also is a drawing showing the sampling locations.

Following receipt of these results, the area was flushed again with copious amounts of water. This water was vacuumed into a vacuum truck and disposed of in one of the onsite injection wells. Following a rainfall, on 7/22/97, a fourth sample was taken of the water in the pit. This sample has been forwarded to the laboratory for analysis for Total Chromium. The results of this additional sample will be submitted after receipt.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

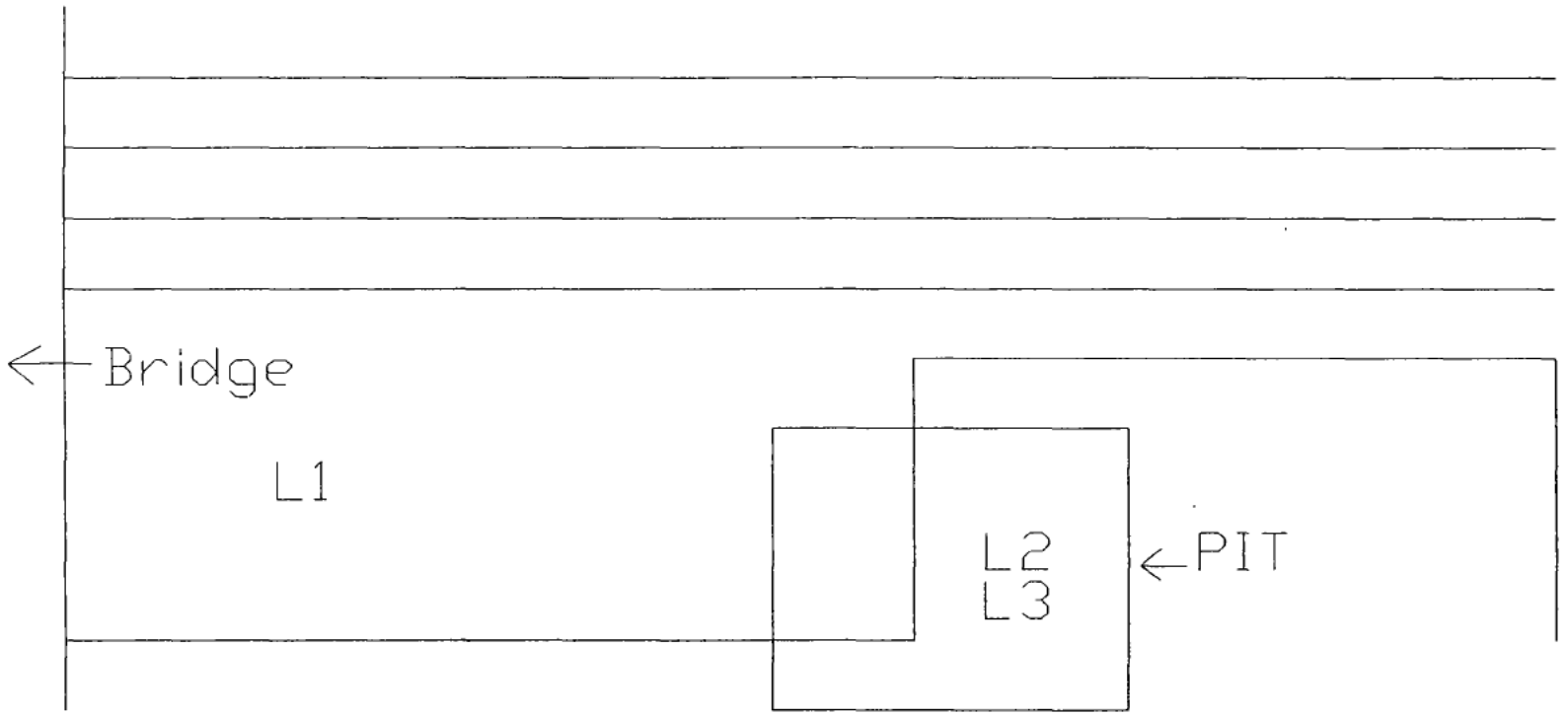
CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/SLC/tr

Enclosures

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-Onsite Inspector



L1 Sample taken at 10:09 am 6/26/97

~~L2 Sample taken at 10:09 am 6/26/97~~

L3 Sample taken at 8:30 am 7/2/97

CWMVICKERY

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Chris Hines

Report Date: *16-Jul-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-15158
Your Sample ID: 9706667-L1
Date Logged-In: 7/7/97
Sample Source: Other/Undefined
Matrix: Other/ Undefine
Client Project #:
PO#: VK-1779
Project #:
Date Submitted to Lab: 7/3/97

- COLLECTION INFORMATION -

Date/Time/By: 6/26/97

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
PB-ICP	200.7/6010	Lead, Pb	< 150	UG/L	7/11/97	SMM	4496
CR6-GFAA	218.5/7195	Chromium, Hexavalent (Cr 6+)	19000	UG/L	7/7/97	BLD	4404

Note: The sample was received outside the holding time for hexavalent chromium and a HNO3 container was not received for total lead analysis.

End of Report

Report Approved By: Deborah K. Johnson

RECEIVED
JUL 21 1997
VICKERY

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039 **Report Date:** *16-Jul-97*

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Phone: (419) 547-7791 **Ext:**

Attn: Chris Hines **FAX:** (419) 547-6144

Our Lab #: MAR97-15159 **Your Sample ID:** 9706668-L2
Date Logged-In: 7/7/97 **Sample Source:** Other/Undefined
Matrix: Other/ Undefine **Client Project #:** **PO#:** VK-1779
Project #: **Date Submitted to Lab:** 7/3/97

- COLLECTION INFORMATION -

Date/Time/By: 6/26/97

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
PB-ICP	200.7/6010	Lead, Pb	< 150	UG/L	7/11/97	SMM	4496
CR6-GFAA	218.5/7195	Chromium, Hexavalent (Cr 6+)	3200	UG/L	7/3/97	BLD	4404

Note: The sample was received outside the holding time for hexavalent chromium and a HNO3 container was not received for total lead analysis.

End of Report

Report Approved By: Deborah K. Johnson

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JUL 21 1997
VICKERY

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PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I0039 **Report Date:** *16-Jul-97*

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Phone: (419) 547-7791 **Ext:**

Attn: Chris Hines **FAX:** (419) 547-6144

Our Lab #: MAR97-15160 **Your Sample ID:** 9706810-L3
Date Logged-In: 7/7/97 **Sample Source:** Other/Undefined
Matrix: Other/ Undefine **Client Project #:** **PO#:** VK-1779
Project #: **Date Submitted to Lab:** 7/3/97

- COLLECTION INFORMATION -

Date/Time/By: 7/2/97

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
PB-ICP	200.7/6010	Lead, Pb	< 150	UG/L	7/11/97	SMM	4496
CR6-GFAA	218.5/7195	Chromium, Hexavalent (Cr 6+)	770	UG/L	7/3/97	BLD	4404

Note: The sample was received outside the holding time for hexavalent chromium and a HNO3 container was not received for total lead analysis.

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

RECEIVED
JUL 21 1997
VICKERY

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

Client Name:	CWM Vickery
Project Name:	
Project No.	
Sampler:	

Sample ID	Date	Time	grab/ comp	Matrix	ATEL Lab Number	# of Cont.	Analysis Required
9706667-L1	Sampled 6-26-97			liquid	15158	1	Metals - Pb, Cr (hexavalent only)
9706668-L2	6-26-97			↓	15159	1	↓
9706810-L3	7-2-97			↓	15160	1	↓

SEND RESULTS TO:

Person: Chris Hines

Company: CWM Vickery

Street: 3956 State Route 412

City: Vickery State: Ohio Zip: 43464

Phone: (419) 547-7791 Fax:

ATEL Quote #: Company PO #:

Relinquished by: Rachael Tebrock	Date/Time 1000 AM 7-2-97	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received at Laboratory by: Kenna M Thomas	Date/Time 7/3/97

Comments:

Method of Shipment:

Cooler Temperature: 23 °C

Canton: 5300 Fulton Drive NW, Canton, Ohio 44718, 800-635-3222 fax 216-494-2961

Marion: 1776 Marion-Waldo Rd, Marion, Ohio 43302, 800-873-2835 fax 614-389-1481

Sanford: 936 N Homer Boulevard, Sanford, North Carolina 27330, 800-522-2832 fax 919-774-7068

Tucson: 2700 E Bilby Rd. Bldg. A, Tucson, Arizona 85706, 800-879-2835 fax 520-573-6550

Melmore: 6878 S State Rt. 100, Melmore, Ohio 44845, 800-858-8869 fax 419-397-2229

Mission Viejo: 27531 Chantaga Drive, Mission Viejo, California 92692, 800-263-2261 fax 714-348-1922

Chemical Waste Management, Inc.

3956 STATE ROUTE 412 • VICKERY, OHIO 43464 • 419-547-7791 • FAX: 419-547-6144

FEDERAL EXPRESS

July 11, 1997

Ohio Environmental Protection Agency
Division of Hazardous Waste Management
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43216-1049

RCRA Permitting Branch, HRP-8J
Waste Management Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Ohio Section

Re: Chemical Waste Management, Inc. - Vickery
Tank System Release Report

Dear Sirs:

On June 13, 1997, Chemical Waste Management, Inc. (CWM), Vickery experienced a release from a portion of its tank system. Enclosed please find a copy of the tank system release report which is being submitted as in accordance with Part B Permit Condition D.8(b) and OAC 3745-55-96(D)(3). The attached document describes the incident, our response actions, actions taken to prevent further release, clean up procedures followed, and repairs made to the system.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Ms. Sandy Clark at (419) 547-3335.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F.G. Nicar
General Manager

FGN/slc

Attachments

cc w/: Beth Ames, OEPA-NWDO
Dave Schilt, OEPA-NWDO

Tank System Release Report

Incident #53

1. **Date of Release:** June 13, 1997

2. **Reported to:** OEPA-NWDO, left message on answering machine for Chuck Hull as neither Beth Ames or Chuck Hull were available, 8:56 am; OEPA-EMG, Chris Holmes, 9:01 am, Report #9706-72-2372; National Response Center, Petty Officer Garneau, 9:06 am, Report #390997; OEPA Onsite Inspector - Brandi Kowalka, Upon arrival at site at 10:00 am. USEPA Region 5, John Maritote, 10:20 am.

   During the clean up activities, CWM reviewed its response plans with Dave Schilt, the Ohio EPA onsite inspection.

3. **Date Reported:** June 13, 1997

4. **Released Material:** Spent mixed acids

5. **Amount Released:** Approximately 50 gallons.

6. **Release Location:** Underneath bridge west of the T-Tank pumphouse; pipeline located between V-Tanks to T-Tanks; V-5 to T-10 transfer line . Material spilled onto concrete slab under bridge and traveled westward approximately 30 feet along ground. It also migrated into the soil along two of the pipe supports.

7. **Source of Release:** Transfer line.

8. **How was the release stopped:** Unloading was stopped immediately. Transfer line was drained.

9. **Cause of release:** Fiberglass- reinforced plastic transfer line cracked and released material.

10. **Mechanism(s) in place to prevent further releases to the environment:** The section of pipeline was replaced and pressure tested prior to returning to service.

11. **Efforts taken to prevent further migration to soil or surface water:** Lime was spread over the area. Soils that were contaminated were removed and managed

as hazardous wastes. Area was flushed with copious amounts of water. The water was vacuumed into truck and disposed of in onsite injection wells.

12. **Likely route of migration of the release:** The release was contained near the area of the pipeline. Temporary diking was put in place to assure no migration. In addition, CWM Vickery has in place a surface water control system through which surface water run-on and runoff are controlled by a series of ditches and culverts inter-connected by 31 slide gates. Using the slide gates, and spill on site can be isolated, thereby prevent off-site migration and facilitating clean up.

13. **Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):** The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to U.S. EPA and Ohio EPA. For additional details on these topics, please refer to:

    Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to U.S. EPA and Ohio EPA, August 15, 1986)

    Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to U.S. EPA and Ohio EPA, July 15, 1983)

    Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to U.S. EPA and Ohio EPA, March 8, 1984).

    Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to U.S. EPA and Ohio EPA, May 11, 1984)

14. **Proximity to downgradient drinking water, surface water, and population areas:** The closest potable drinking water well to the release is located on-site, approximately 300 feet from the bridge. The potable well is separated from the release area by dikes and ditches associated with surface water management areas. The depth of the potable well is approximately 70 feet. The nearest surface water

is Meyers Ditch. The distance to Meyers Ditch from the area is approximately 500 yards. Meyers Ditch is separated from the release area by a series of ditches, dikes and surface water management gates. Because of the small size of the incident and the fact that it was contained in the immediate area, the downgradient proximity of surface water and population area was not an issue with this incident.

15. **Description of monitoring or sampling:** A sample was taken of the aqueous liquid material that collected in the area prior to the completion of the excavation to check the pH, acidity and nitrate content. Those results were submitted on 6/19/97 with the Contingency Plan Report.

During the clean up activities, when precipitation accumulated in the excavated pit, it was checked for color and pH. The pH was taken using pH paper and results ranged from 6 to 7. The accumulated liquid was then vacuumed into a vacuum truck and disposed of in one of the onsite injection wells.

On 6/13/96 and 6/16/97, following excavation, six soil samples were taken. These included two surface samples and one sample from each of the four sides of the pit. These samples were analyzed for Total Cadmium, Total Chromium and Total Lead. The results and a sketch of the sample locations are included as Attachment A.

Following receipt of the above results, additional excavation took place on the surface and in the pit. On 6/19/97, eight additional soil samples were taken and analyzed for the same parameters. The results and a sketch of the sample locations are included as Attachment B.

The additional sample results were reviewed. Upgradient sample #12 had a high level of chromium. It appears the high results are related to some other incidence and not to the spill; therefore, it was determined that water quality samples would be a more representative indicator that clean up was complete.

On 6/26/97, two samples were taken of the water in the pit. The area was then flushed with copious amounts of water. On 7/2/97, a third liquid sample was taken of the water in the pit. These samples have been sent to the laboratory for analysis for Total Chromium and Total Lead. These results are expected to be received within the next week and will be submitted upon receipt.

16. **Description of response actions taken or planned:** Unloading was stopped immediately. Transfer line was drained. The section of pipeline was replaced and pressure tested prior to returning to service.

The concrete slab area was treated with lime and rinsed with water and all residue was removed. The water was vacuumed into the vacuum truck and transferred to the tank system.

The soil in the area affected by the spill was treated with lime and excavated. The surface soil was excavated where the liquid had migrated. Approximately 30 feet west of the bridge, an area of soil approximately 4'L x 4'W x 3'H was excavated. Soil samples were taken. Additional excavation took place following receipt of the sample results. Following completion of the excavation, the area was flushed with copious amounts of water. The water was contained, vacuumed into a vacuum truck and disposed of in the onsite injection well system.

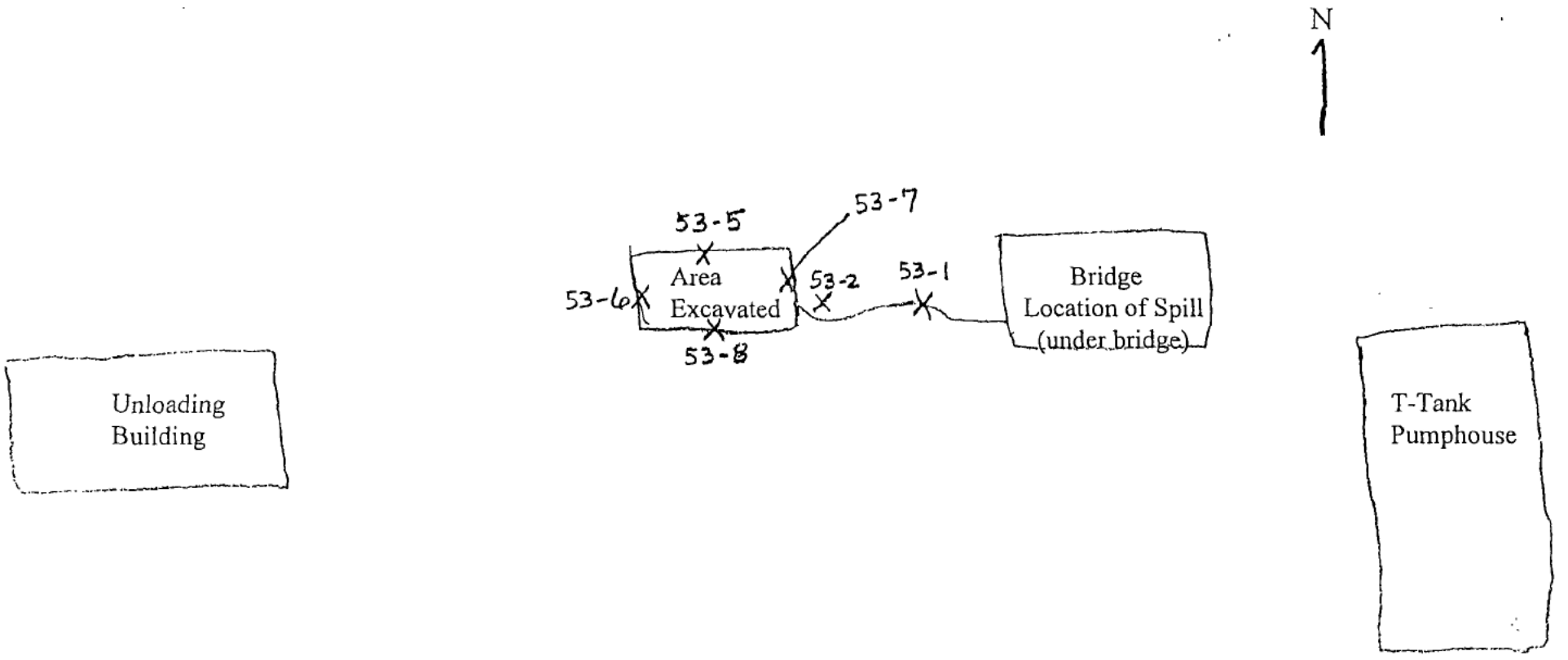
Approximately 8 yards of contaminated soil was excavated and placed in a rolloff box #35482.

Form Completed By: Sandra L. Clark
Environmental Manager

ATTACHMENT A

SKETCH OF SAMPLES AND SAMPLE RESULTS
FOR 6/13/97 AND 6/16/97 SAMPLING

Attachment A
Incident #53
Sketch of Sample Locations



Sample Numbers:

53-1	97-06283	Surface sample (6/13/97)
53-2	97-06284	Surface sample (6/13/97)
53-5	97-06336	North side (6/16/97)
53-6	97-06337	West side (6/16/97)
53-7	97-06338	East side (6/16/97)
53-8	97-06339	South side (6/16/97)

Sample #53-3 and 53-4 were taken in areas that were excavated further; therefore, they were not analyzed. "NOT TO SCALE""

ATEL

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- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Micar

Report Date: *19-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13170 **Your Sample ID:** 9706283 #1
Date Logged-In: 6/17/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 6/17/97

- COLLECTION INFORMATION -

Date/Time/By: 6/13/97 3:00 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	< 0.7	MG/KG	6/17/97	ROH	4126
CR-ICP-S	200.7/6010	Chromium, Cr	16	MG/KG	6/17/97	ROH	4126
PB-ICP-S	200.7/6010	Lead, Pb	12	MG/KG	6/17/97	ROH	4126
TS-%	160.3	Residue, Total (Total Solids)	84.0	%	6/18/97	TLC	4143

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Micar

Report Date: *19-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13171 **Your Sample ID:** 9706284 #2
Date Logged-In: 6/17/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 6/17/97

- COLLECTION INFORMATION -

Date/Time/By: 6/13/97 3:00 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/17/97	ROH	4126
CR-ICP-S	200.7/6010	Chromium, Cr	323	MG/KG	6/17/97	ROH	4126
PB-ICP-S	200.7/6010	Lead, Pb	9	MG/KG	6/17/97	ROH	4126
TS-%	160.3	Residue, Total (Total Solids)	80.2	%	6/18/97	TLC	4143

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Micar

Report Date: *19-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13166
Date Logged-In: 6/17/97
Matrix: Soil/Sludge
Project #:

Your Sample ID: 9706336 #5
Sample Source: RCRA
Client Project #:
Date Submitted to Lab: 6/17/97

PO#:

- COLLECTION INFORMATION -

Date/Time/By: 6/16/97 8:15 AM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/17/97	ROH	4126
CR-ICP-S	200.7/6010	Chromium, Cr	734	MG/KG	6/17/97	ROH	4126
PB-ICP-S	200.7/6010	Lead, Pb	26	MG/KG	6/17/97	ROH	4126
TS-%	160.3	Residue, Total (Total Solids)	75.8	%	6/18/97	TLC	4143

End of Report

Report Approved By: Deborah K. Johnson

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Client #: I0039
Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: *19-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Attn: Fred Micar

Our Lab #: MAR97-13167 **Your Sample ID:** 9706337 #6
Date Logged-In: 6/17/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 6/17/97

- COLLECTION INFORMATION -

Date/Time/By: 6/16/97 8:15 AM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	2	MG/KG	6/17/97	ROH	4126
CR-ICP-S	200.7/6010	Chromium, Cr	1990	MG/KG	6/17/97	ROH	4126
PB-ICP-S	200.7/6010	Lead, Pb	41	MG/KG	6/17/97	ROH	4126
TS-%	160.3	Residue, Total (Total Solids)	79.8	%	6/18/97	TLC	4143

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Micar

Report Date: *19-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13168
Date Logged-In: 6/17/97
Matrix: Soil/Sludge
Project #:

Your Sample ID: 9706338 #7
Sample Source: RCRA
Client Project #:
Date Submitted to Lab: 6/17/97

PO#:

- COLLECTION INFORMATION -

Date/Time/By: 6/16/97 8:15 AM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/17/97	ROH	4126
CR-ICP-S	200.7/6010	Chromium, Cr	17	MG/KG	6/17/97	ROH	4126
PB-ICP-S	200.7/6010	Lead, Pb	12	MG/KG	6/17/97	ROH	4126
TS-%	160.3	Residue, Total (Total Solids)	78.1	%	6/18/97	TLC	4143

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Micar

Report Date: *19-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13169 **Your Sample ID:** 9706339 #8
Date Logged-In: 6/17/97 **Sample Source:** RCRA
Matrix: Soil/Sludge **Client Project #:** **PO#:**
Project #: **Date Submitted to Lab:** 6/17/97

- COLLECTION INFORMATION -

Date/Time/By: 6/16/97 8:15 AM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/17/97	ROH	4126
CR-ICP-S	200.7/6010	Chromium, Cr	72	MG/KG	6/17/97	ROH	4126
PB-ICP-S	200.7/6010	Lead, Pb	23	MG/KG	6/17/97	ROH	4126
TS-%	160.3	Residue, Total (Total Solids)	79.5	%	6/18/97	TLC	4143

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

Client Name:	CWM Vickery
Project Name:	
Project No.	
Sampler:	Kenny Franks / Jeff Corbett

Sample ID	Date	Time	grab/ comp	Matrix	ATEL Lab Number	# of Cont.	Analysis Required
970 6336 #5	6-16-97	8:15 AM	Grab	Dirt	13166		Cd, Cr, Pb,
970 6337 #6	6-16-97				13167		
970 6338 #7	6-16-97				13168		
97 063 39 #8	6-16-97				13169		
9706283 #1	6-13-97	3:00 pm			13170		
9706284 #2	6-13-97	3:00 pm			13171		

SEND RESULTS TO:

Person: ~~Chris Hines~~ ~~Steve Tonneman~~ Fred Miller

Company: CWM Vickery

Street: 3956 State Route 412

City: Vickery State: Ohio Zip: 43464

Phone: (419) 547-7791 Fax:

ATEL Quote #: Company PO #:

Relinquished by: Roberta Porter	Date/Time 6-16-97	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received at Laboratory by: Thekla Ames Vicky Jukes	Date/Time 6-16-97 6-17-97
Comments:		Method of Shipment	
		Cooler Temperature:	7.0°C

Canton: 5300 Fulton Drive NW, Canton, Ohio 44718, 800-635-3222 fax 216-494-2961

Marion: 1776 Marion-Waldo Rd, Marion, Ohio 43302, 800-873-2835 fax 614-389-1481

Sanford: 936 N Horner Boulevard, Sanford, North Carolina 27330, 800-522-2832 fax 919-774-7068

Tucson: 2700 E Bilby Rd. Bldg. A, Tucson, Arizona 85706, 800-879-2835 fax 520-573-6550

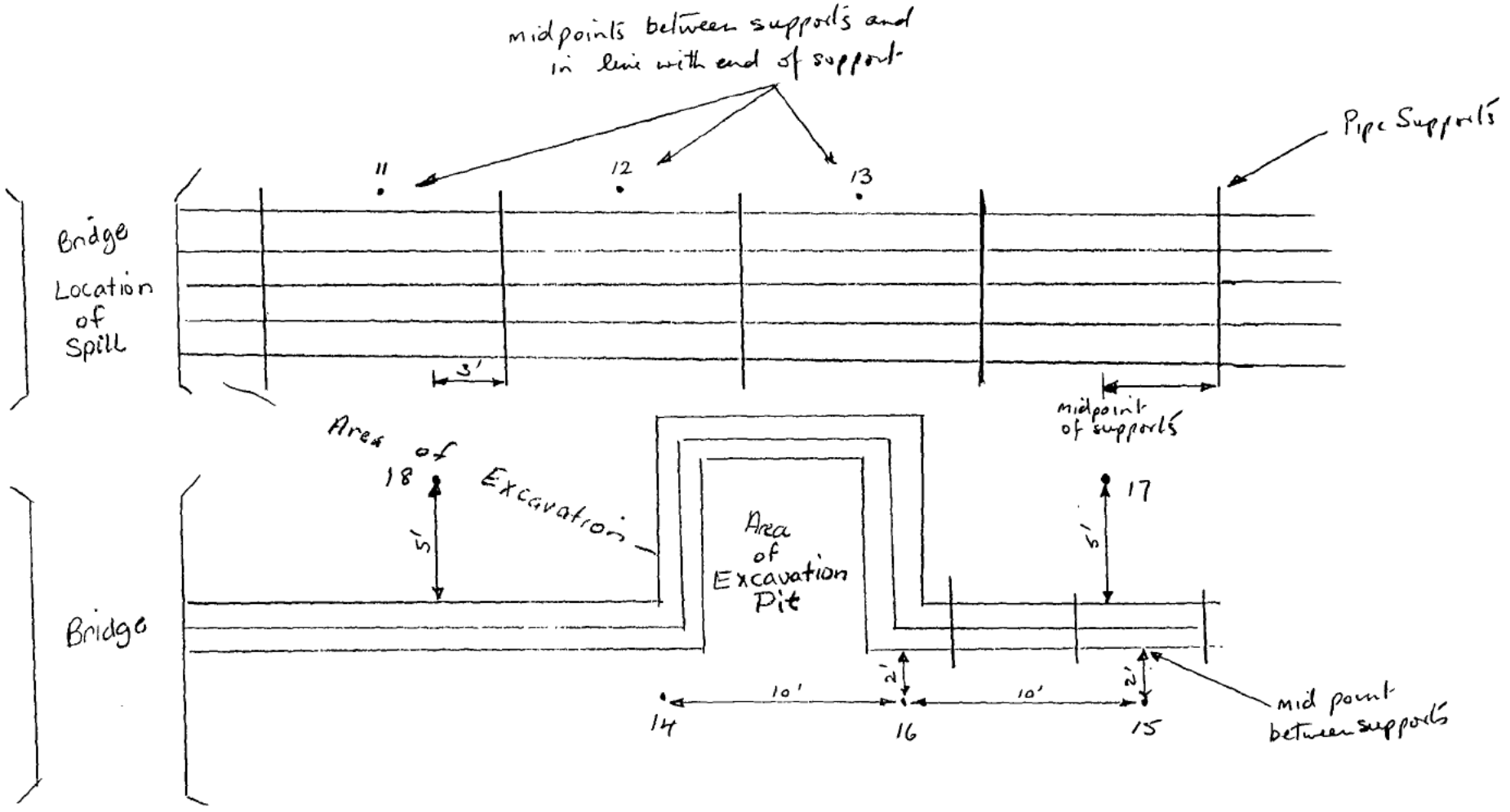
Melmore: 6878 S State Rt. 100, Melmore, Ohio 44845, 800-858-8869 fax 419-397-2229

Mission Viejo: 27531 Chantaga Drive, Mission Viejo, California 92692, 800-263-2261 fax 714-348-1922

ATTACHMENT B

SKETCH OF SAMPLES AND SAMPLE RESULTS
FOR 6/19/97 SAMPLING

Attachment B
Incident #53.



N

Sampling Plan 6/19/97

ATEL

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VICKERY

Client #: I0039
Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: *24-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Attn: Fred Nicar

Our Lab #: MAR97-13775 **Your Sample ID:** 9706460 (#11)
Date Logged-In: 6/23/97 **Sample Source:** Other/Undefined
Matrix: Soil/Sludge **Client Project #:** **PO#:** VK1776
Project #: **Date Submitted to Lab:** 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/23/97	RCB	4188
CR-ICP-S	200.7/6010	Chromium, Cr	20	MG/KG	6/23/97	RCB	4188
PB-ICP-S	200.7/6010	Lead, Pb	6	MG/KG	6/23/97	RCB	4188
TS-%	160.3	Residue, Total (Total Solids)	78.9	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson
Deborah K. Johnson

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VICKERY

- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Nicar

Report Date: *24-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13776 **Your Sample ID:** 9706461 (#12)
Date Logged-In: 6/23/97 **Sample Source:** Other/Undefined
Matrix: Soil/Sludge **Client Project #:** **PO#:** VK1776
Project #: **Date Submitted to Lab:** 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/23/97	RCB	4188
CR-ICP-S	200.7/6010	Chromium, Cr	123	MG/KG	6/23/97	RCB	4188
PB-ICP-S	200.7/6010	Lead, Pb	14	MG/KG	6/23/97	RCB	4188
TS-%	160.3	Residue, Total (Total Solids)	84.3	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Nicar

Report Date: *24-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13777
Your Sample ID: 9706462 - (13)
Date Logged-In: 6/23/97
Sample Source: Other/Undefined
Matrix: Soil/Sludge
Client Project #:
PO#: VK1776
Project #:
Date Submitted to Lab: 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/23/97	RCB	4188
CR-ICP-S	200.7/6010	Chromium, Cr	9	MG/KG	6/23/97	RCB	4188
PB-ICP-S	200.7/6010	Lead, Pb	7	MG/KG	6/23/97	RCB	4188
TS-%	160.3	Residue, Total (Total Solids)	81.3	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson

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- CERTIFICATE OF ANALYSIS -

Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Nicar

Report Date: *24-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13778 **Your Sample ID:** 9706463 (#14)
Date Logged-In: 6/23/97 **Sample Source:** Other/Undefined
Matrix: Soil/Sludge **Client Project #:** **PO#:** VK1776
Project #: **Date Submitted to Lab:** 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	2	MG/KG	6/23/97	RCB	4188
CR-ICP-S	200.7/6010	Chromium, Cr	31	MG/KG	6/23/97	RCB	4188
PB-ICP-S	200.7/6010	Lead, Pb	65	MG/KG	6/23/97	RCB	4188
TS-%	160.3	Residue, Total (Total Solids)	82.0	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Nicar

Report Date: *24-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13779 **Your Sample ID:** 9706464 (PIK)
Date Logged-In: 6/23/97 **Sample Source:** Other/Undefined
Matrix: Soil/Sludge **Client Project #:** **PO#:** VK1776
Project #: **Date Submitted to Lab:** 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/23/97	RCB	4188
CR-ICP-S	200.7/6010	Chromium, Cr	10	MG/KG	6/23/97	RCB	4188
PB-ICP-S	200.7/6010	Lead, Pb	8	MG/KG	6/23/97	RCB	4188
TS-%	160.3	Residue, Total (Total Solids)	78.9	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039 **Report Date:** *24-Jun-97*

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Phone: (419) 547-7791 **Ext:**

Attn: Fred Nicar **FAX:** (419) 547-6144

Our Lab #: MAR97-13780 **Your Sample ID:** 9706465 (#16)
Date Logged-In: 6/23/97 **Sample Source:** Other/Undefined
Matrix: Soil/Sludge **Client Project #:** **PO#:** VK1776
Project #: **Date Submitted to Lab:** 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	1	MG/KG	6/23/97	RCB	4188
CR-ICP-S	200.7/6010	Chromium, Cr	7	MG/KG	6/23/97	RCB	4188
PB-ICP-S	200.7/6010	Lead, Pb	< 8	MG/KG	6/23/97	RCB	4188
TS-%	160.3	Residue, Total (Total Solids)	81.5	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039

Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Attn: Fred Nicar

Report Date: *24-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Our Lab #: MAR97-13781
Your Sample ID: 9706466 (#17)
Date Logged-In: 6/23/97
Sample Source: Other/Undefined
Matrix: Soil/Sludge
Client Project #:
PO#: VK1776
Project #:
Date Submitted to Lab: 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	0.6	MG/KG	6/23/97	LLJ	4188
CR-ICP-S	200.7/6010	Chromium, Cr	10	MG/KG	6/23/97	LLJ	4188
PB-ICP-S	200.7/6010	Lead, Pb	6	MG/KG	6/23/97	LLJ	4188
TS-%	160.3	Residue, Total (Total Solids)	80.6	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Client #: I0039
Chemical Waste Management - Vickery
3956 State Route 412
Vickery, OH 43464

Report Date: *24-Jun-97*

Phone: (419) 547-7791 **Ext:**
FAX: (419) 547-6144

Attn: Fred Nicar

Our Lab #: MAR97-13782 **Your Sample ID:** 9706467 (418)
Date Logged-In: 6/23/97 **Sample Source:** Other/Undefined
Matrix: Soil/Sludge **Client Project #:** **PO#:** VK1776
Project #: **Date Submitted to Lab:** 6/20/97

- COLLECTION INFORMATION -

Date/Time/By: 6/19/97 1:20 PM FRANKS

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
CD-ICP-S	200.7/6010	Cadmium, Cd	0.5	MG/KG	6/23/97	LLJ	4188
CR-ICP-S	200.7/6010	Chromium, Cr	9	MG/KG	6/23/97	LLJ	4188
PB-ICP-S	200.7/6010	Lead, Pb	6	MG/KG	6/23/97	LLJ	4188
TS-%	160.3	Residue, Total (Total Solids)	80.6	%	6/20/97	TLC	4191

End of Report

Report Approved By: Deborah K. Johnson
Deborah K. Johnson

1776 MARION-WALDO RD. • P.O. BOX 436 • MARION, OH 43301-0436
PHONE 614-389-5991 • 1-800-873-2835 • FAX 614-389-1481

ATEL

Aqua Tech Environmental Laboratories, Inc.

Client Name: CWM Vickery

Project Name:

Project No.

Sampler: Kenny Franks

Sample ID	Date	Time	grab/comp	Matrix	ATEL Lab Number	# of Cont.	Analysis Required
9706460	6-19-97	1:20	grab	Soil	13775		Cd, Cr, Pb metals
9706461	↓	↓	↓	↓	13776		↓
9706462	↓	↓	↓	↓	13777		↓
9706463	↓	↓	↓	↓	13778		↓
9706464	↓	↓	↓	↓	13779		↓
9706465	↓	↓	↓	↓	13780		↓
9706466	↓	↓	↓	↓	13781		↓
9706467	↓	↓	↓	↓	13782		↓

SEND RESULTS TO:

Person: ~~Chris Hines~~ Fred MICAR

Company: CWM Vickery

Street: 3956 State Route 412

City: Vickery State: Ohio Zip: 43464

Phone: (419) 547-7791 Fax:

ATEL Quote #: Company PO #:

Relinquished by:	Date/Time	Received by:	Date/Time
Roberta Prosky	6-19-97		
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received at Laboratory by: Nickolas Rivera 6-19	3:30

Comments: Vicky Wells 6-20-97 7:00

Method of Shipment

Cooler Temperature: °C

Canton: 5300 Fulton Drive NW, Canton, Ohio 44718, 800-635-3222 fax 216-494-2961

Marion: 1776 Marion-Waldo Rd, Marion, Ohio 43302, 800-873-2835 fax 614-389-1481

Sanford: 936 N Horner Boulevard, Sanford, North Carolina 27330, 800-522-2832 fax 919-774-7068

Tucson: 2700 E Bilby Rd. Bldg. A, Tucson, Arizona 85706, 800-879-2835 fax 520-573-6550

Melmore: 6878 S State Rt. 100, Melmore, Ohio 44845, 800-858-8869 fax 419-397-2229

Mission Viejo: 27531 Chantaga Drive, Mission Viejo, California 92692, 800-263-2261 fax 714-348-1922

Chemical Waste Management, Inc.
3956 State Rt 412
Vickery, Ohio 43464
419/547-7791

April 20, 1989

O: WMD
CC: RF
C.M. 976680668

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Valdus Adamkus, Director — P-976 680 668
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Mr. Richard Shank, Director — P-976 680 669
Ohio Environmental Protection Agency
1800 Watermark Drive
Columbus, Ohio 43266

Gentlemen:

Please find enclosed a tank system release report that describes what happened, our response actions, actions taken to prevent further release, and clean up procedures followed.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please don't hesitate to call me at (419) 547-7791.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F. G. Nicar
General Manager

FGN/ms
cc: Scott Maris
Charles Hull, OEPA/NWDO

Tank System Release Report

Date of release: 3-30-89 Reported to: OEPA/ER, Rich Carter; NRC, King

Date reported: 3-30-89 Released material: Spent Pickle Liquor & Landfill Leachate (K062 - F006)

Amount released: Approximately 20 Gallons

Release location: Between Filter Building 1 and the Filtered Acid Tanks A & B Concrete Containment.

Source of release: The filter press precoat tank located in filter building # 1

How was the release stopped? An operator heard the alarm, investigated, and shut the water fill valve.

Cause of release: During preparation of filter aid that is to be applied to the filter press, fresh water is added to the precoat tank along with a specified amount of filter aid. The release occurred when the operator mixing the precoat, momentarily had to leave the area. During his absence, the tank overflowed.

Mechanism(s) in place to prevent further releases to the environment:

When preparing the precoat mixture, the operators have been instructed to monitor the tank filling operation from start to finish.

Efforts taken to prevent further migration to soil or surface water:

Free standing liquid was collected and deepwell disposed on-site. Affected soil was neutralized and placed in drums. Drums are in storage awaiting off-site disposal at a RCRA approved disposal facility.

Likely route of migration of the release:

The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts interconnected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup.

Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):

The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA and OEPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to OEPA and USEPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to OEPA and USEPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to OEPA and USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to OEPA and USEPA, May 11, 1984)

Results of any monitoring or sampling conducted in connection with the release:

After soil neutralization and clean-up, the pH of the remaining soil was found to be 11.85.

Proximity to downgradient drinking water, surface water, and population areas:

The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well, associated with the truck unloading building, has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is 126 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

Description of response actions taken or planned:

Cleanup of the release was performed as described earlier. No further actions are planned.

Form Completed By: Scott Maris
ms/FORM2

Chemical Waste Management, Inc.
3956 State Rt 412
Vickery, Ohio 43464
419/547-7791

TO:-m

O: WMD-
CC: RF

April 5, 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
741310627

Mr. Valdus Adamkus, Director
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

P-741 310 627

Mr. Richard Shank, Director
Ohio Environmental Protection Agency
1800 Watermark Drive
Columbus, Ohio 43266

P-741 310 628

Gentlemen:

Please find enclosed a tank system release report that describes what happened, our response actions, actions taken to prevent further release, clean up procedures followed, and repairs made to the system.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please don't hesitate to call me at (419) 547-7791.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

p.p.
F. G. Nicar
General Manager

FGN/ms
cc: Scott Maris
Charles Hull, OEPA/NWDO

Tank System Release Report

Date of release: 3-2-89 Reported to: OEPA, NWDO, Cindy;
OEPA, ER, Rich Carter;
NRC, James Heard

Date reported: 3-2-89 Released material: Spent Pickle Liquor (K062)

Amount released: 1/2 Gallon

Release location: To the ground at the base of Tank W-5.

Source of release:

A blind flange on a fill line on top of Tank W-5.

How was the release stopped?

Tank W-5 fill line was drained.

Cause of release:

A blind flange on a fill line to W-5 was improperly installed during decommissioning of the tank. Thermal expansion of a static column of liquid in the blanked line resulted in a seep from the improperly installed blind flange to top of W-5 and subsequently, to the ground below.

Mechanism(s) in place to prevent further releases to the environment:

The line was drained and the blind flange was properly reinstalled.

Efforts taken to prevent further migration to soil or surface water:

Contaminated soil was limed, collected, and properly disposed of off-site. Contacted insulation on the side of Tank W-5 was also removed and properly disposed of as hazardous waste.

Likely route of migration of the release:

The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts interconnected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup.

Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):

The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA and OEPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to OEPA and USEPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to OEPA and USEPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to OEPA and USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to OEPA and USEPA, May 11, 1984)

Results of any monitoring or sampling conducted in connection with the release:

Cleaned up soil pH was 9.65 and PCB's were < 1ppm.

Proximity to downgradient drinking water, surface water, and population areas:

The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well, associated with the truck unloading building, has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is 126 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

Description of response actions taken or planned:

Cleanup of the release was performed as described earlier. No further actions are planned.

Form Completed By: Scott Maris
ms/FORM2

Chemical Waste Management, Inc.
3956 State Rt 412
Vickery Ohio 43464
419/547-7791

[redacted]

O: WMD
CC: RF
C.M. 741310624

[redacted]

March 29, 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Valdus Adamkus, Director — P-741 310 624
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Mr. Richard Shank, Director — P-741 310 625
Ohio Environmental Protection Agency
1800 Watermark Drive
Columbus, Ohio 43266

Gentlemen:

Please find enclosed a tank system release report that describes what happened, our response actions, actions taken to prevent further release, clean up procedures followed, repairs made to the system, and a certification of the repairs.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please don't hesitate to call me at (419) 547-7791.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F. G. Nicar
General Manager

RECEIVED
MAR 31 1989
U. S. EPA REGION 5
OFFICE OF REGIONAL ADMINISTRATOR

FGN/ms
cc: Scott Maris
Charles Hull, OEPA/NWDO

Tank System Release Report

Date of release: 2-28-89 Reported to: OEPA, Thempton Toorkey; OEPA-NWDO, Jeff Steers; OEPA/ER, Tim Hicken; Nat. Resp. Center, James Heard

Date reported: 2-28-89 Released material: Waste Pickle Liquor, K062

Amount released: Approximately 1/2 Gallon

Release location: To the ground below the leak detection pot at pumphouse #5.

Source of release:

The material was released from the Well 5 injection line (primary containment line) during well operation. It flowed within the secondary containment line to a leak detection pot which subsequently overflowed.

How was the release stopped?

Well 5 injection pump was automatically shut-off by a loss of pressure actuated shut-off device.

Cause of release:

Failure of a threaded pipe coupler on the Well 5 injection line.

Mechanism(s) in place to prevent further releases to the environment:

Threaded coupler on Well #5 Transfer Line has been replaced.

Efforts taken to prevent further migration to soil or surface water:

Contaminated soil was limed, collected, and properly disposed of off-site.

Likely route of migration of the release:

The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts interconnected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup.

Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):

The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA and OEPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to OEPA and USEPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to OEPA and USEPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to OEPA and USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to OEPA and USEPA, May 11, 1984)

Results of any monitoring or sampling conducted in connection with the release:

Analysis of soil after cleanup:

pH 6.95 and < 0.5 ppm, PCB's

Proximity to downgradient drinking water, surface water, and population areas:

The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well, associated with the truck unloading building, has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is 126 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

Description of response actions taken or planned:

Cleanup of the release was performed as described earlier. No further actions are planned.

Form Completed By: Scott Maris
ms/FORM2

Jerry

Chemical Waste Management Inc.
3956 State Rt. 412
Vickery, Ohio 43464
419 547-7791

January 24, 1989

O: WMD -
CC: RF

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

538744968

Mr. Valdus Adamkus, Director — P-538 744 968
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Mr. Richard Shank, Director — P-538 744 979
Ohio Environmental Protection Agency
1800 Watermark Drive
Columbus, Ohio 43266

Gentlemen:

Please find enclosed a tank system release report that describes what happened, our response actions, actions taken to prevent further release, clean up procedures followed, repairs made to the system, and a certification of the repairs.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please don't hesitate to call me at (419) 547-7791.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F. G. Nicar
General Manager

FGN/ms
cc: Scott Maris
Charles Hull, OEPA/NWDO

Tank System Release Report

Date of release: 1-6-89 Reported to: OEPA, NWDO-Tina; OEPA/ER, Ken Shultz; NRC, Ensign Bosleg (#243)

Date reported: 1-6-89 Released material: Retention Basin Runoff/K062

Amount released: Approximately 45 Gallons

Release location:

The runoff was released to the ground beside three inspection pots on the Retention Basin to W-Tank (RB-WT) pipeline. The first pot is below the southeast corner of the closure cell berm; the second pot is centrally located below the south berm of the closure cell; and the third pot is below the west closure cell berm. Runoff escaping from the first pot was contained in the E-2 ditch, runoff overflowing the second pot was contained in a natural depression at the inspection pot, and runoff overflowing the third pot was contained in the B-3 ditch.

The RB-WT line is a two inch flexible polyethylene line (primary containment) contained within a four inch PVC line (secondary containment). The primary line is punctuated by three inspection pots. The PVC containment lines are attached to the inspection pots on two sides, but are interrupted within the pot to expose the primary line. The primary line consisted of 200 foot sections with mechanical connections. Our investigation into the failure has revealed that three mechanical connections on the primary line were damaged by contraction resulting from cold weather. Contraction also pulled the secondary containment line from inspection pots in two places. Consequently, when the transfer pump was started, liquid escaped from the primary line at the three damaged mechanical connections, and flowed within the secondary line to the inspection pots where the liquid escaped at the line connection to the pot, or because the pot overflowed.

How was the release stopped?

When the pump was started, a man was stationed at the pump with a two way radio. A second man, also with a two way radio, was stationed at the first pot, and a third man was stationed at the third pot. Very shortly after starting the pump, the man at the first pot observed liquid flowing from the secondary line; he immediately radioed and ordered the man at the pump to turn the pump off.

Mechanism(s) in place to prevent further releases to the environment:

Four aspects of the line have been redesigned and retrofitted:

1) The mechanical connections of the primary line were disassembled, solvent welded, and reinstalled, (i.e., the primary line connections are now both solvent welded and mechanically coupled);

2) To allow for expansion and contraction, three six-foot long expansion loops have been installed on the primary line;

3) To allow for expansion and contraction of the secondary containment line, an extra foot of line now protrudes into the inspection pots at each secondary line/ inspection pot connection; and

4) The volume of the inspection pots has been increased from approximately 17 gallons to approximately 350 gallons. The primary line expansion loops are supported within the inspection pots.

The above described repairs have been certified. The certification is attached.

Efforts taken to prevent further migration to soil or surface water:

All runoff and contacted water was immediately collected with a vacuum truck and properly disposed of on-site. All visibly contacted soil was collected and placed in a rolloff box prior to off-site disposal at a permitted landfill.

Likely route of migration of the release:

The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts interconnected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup. As previously mentioned, runoff reaching the B-3 ditch and the E-2 ditch, was immediately contained behind closed slide gates.

Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):

The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA and OEPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to OEPA and USEPA, August 15, 1986)

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Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to OEPA and USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to OEPA and USEPA, May 11, 1984)

Results of any monitoring or sampling conducted in connection with the release:

Background water (Myers Ditch) pH 7.6, PCB < 0.05, Cr. < 0.01, and Pb 0.13. Contacted E-Ditch water sample after cleanup pH 7.85, PCB < 0.05, Cr < 0.01, and Pb 0.07. Contacted B-Ditch water sample after cleanup pH 8.00, PCB < 0.05, Cr 0.01, and Pb 0.14. Retention basin runoff pH 7.70, PCB < 0.05, Cr 0.02, and Pb 0.48. Metals and PCB concentrations in mg/L.

Proximity to downgradient drinking water, surface water, and population areas:

The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well, associated with the truck unloading building, has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is 126 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

Description of response actions taken or planned:

Cleanup of the release was performed as described earlier. No further actions are planned.

Form Completed By: _____
ms/FORM2

DESIGN/CONSTRUCTION MODIFICATION 1/19/89

The three detection pots (See Technical Summary - Leak Detection and Support Photo 2 of November 11, 1988 Certification) were changed to facilitate not only leak detection, but also temperature construction and/or expansion. The modified pots are:

1) 54" x 36" x 42" deep concrete box structures which the outer 4" diameter pipe is sleeved through the structure walls, and

2) The 2" diameter high density polyethylene inner carrier pipe is connected via a thick walled wire core rubber hose which is looped to approximately 2 ft. diameter and connected to the carrier pipe with hose clamps. The three modified leak detection/thermal expansion structures are at the same locations, original pots and photographs are attached.

CERTIFICATION

I, Donald Angelbeck, have inspected the installation of the repaired and modified temporary pipeline located at Chemical Waste Management, Inc., Vickery, Ohio, and certify that it has been repaired/modified using normal engineering practices, and that the repaired system is capable of handling hazardous wastes without release for the intended life of the system.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Donald L. Angelbeck 1/19/89 OH10037613

Donald Angelbeck P.E.
KUSMER MUSTERIC AND ASSOCIATES, INC.
622 West State Street
Fremont, Ohio 43420

PRESSURE TESTING OF TRANSFER AND INJECTION LINES
CHECKLIST

Date: JAN. 17, 1989 Time: 10:00 AM Test # P/T: _____

A. Pipe section and location:

1. Piping System: RETENTION AREA TO TANK NO. W-5

2. Pipe Section - Pipe Stand Start #: _____

- Pipe Stand Stop #: _____

B. Pipe construction and operational pressures:

1. Pipe Construction: _____

2. Pipe Maximum Pressure: 60 LBS. psig

3. Pipe Operational Pressure: 38 LBS. psig

4. Pipe Operational Temperature: -20° F TO 100° F °F

C. Reason for pressure test? RCRA CERTIFICATION

D. Pipe test to be conducted? High pressure 60 LB. Low Pressure

E. Pipe testing check:

		YES	NO	NA	COMMENT
1.	Line Breaking completed:	( )	( )	( )	
2.	Line flush completed:	( )	( )	( )	
3.	Test pump checked:	( )	( )	( )	
4.	Test gauge checked:	( )	( )	( )	
5.	Line blanked or capped:	( )	( )	( )	
6.	Test fittings & hoses checked:	( )	( )	( )	

F. Cyclic pressure test - number of pressurization: _____

1. 60 psig for 1 hr/~~min~~.
2. 60 psig for 1 hr/~~min.~~
3. 60 psig for 1 hr/~~min.~~
4. _____ psig for _____ hr/min.
5. _____ psig for _____ hr/min.
6. _____ psig for _____ hr/min.
7. _____ psig for _____ hr/min.
8. _____ psig for _____ hr/min.
9. _____ psig for _____ hr/min.
10. _____ psig for _____ hr/min.

NOTE OPTIONAL ON LOW PRESSURE TESTS.

2. Time pressure test: Time Start: 10:00 AM Time End: 1:00 P.M.

   Number of Inspections: 3

3. Comments: NO PRESSURE LOSS. NO JOINT LEAKAGE USING SOAP SOLUTION AT ALL JOINTS.

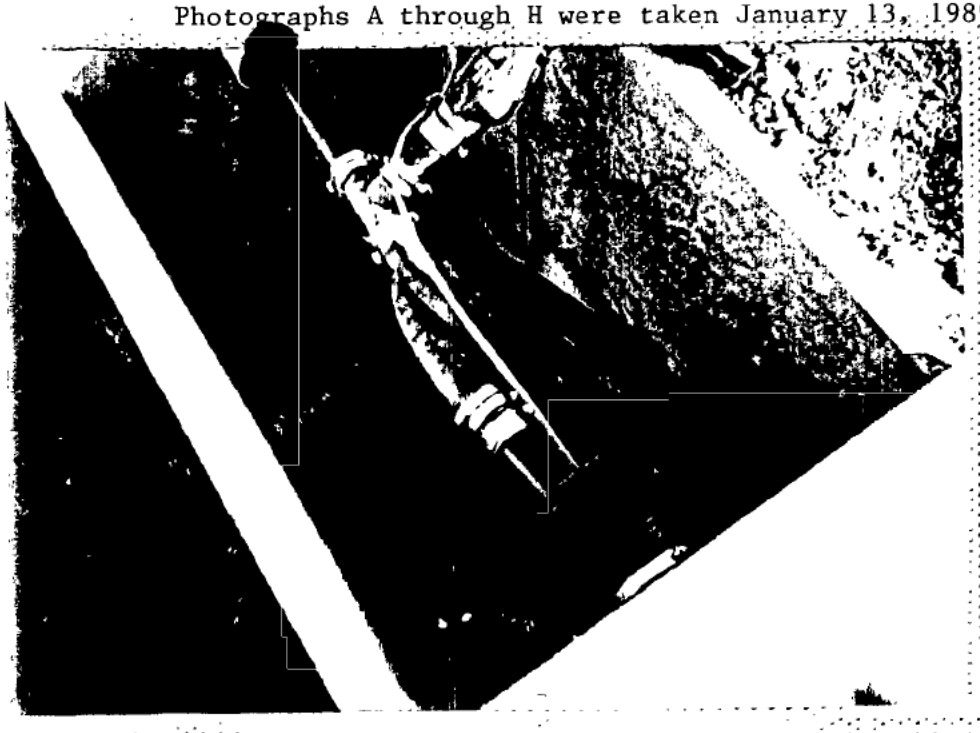
Daniel D. McNamee 1-17-89
Testing Operator Date

William Pontack 1/17/89
Shift Supervisor Date

DLM-WP
11/88

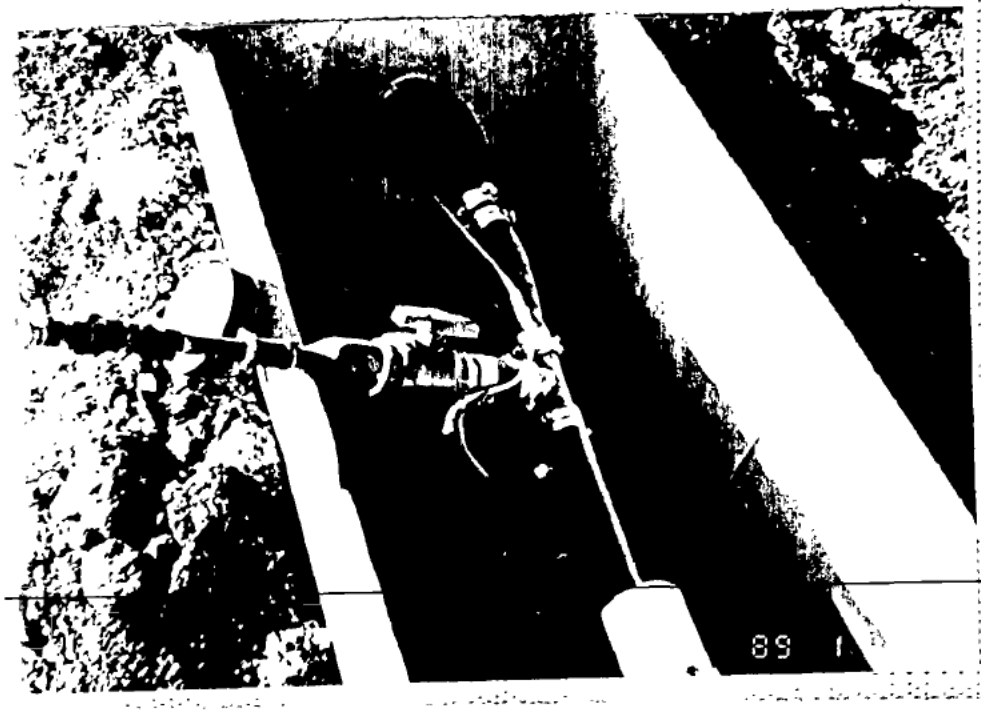
Photographs A through H were taken January 13, 1989.

A

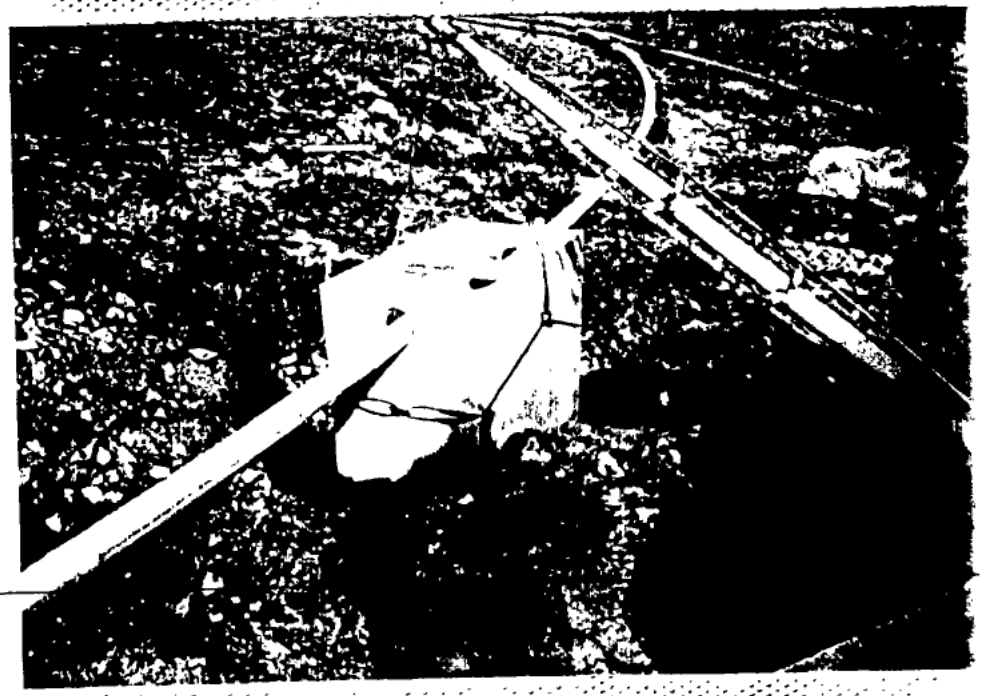


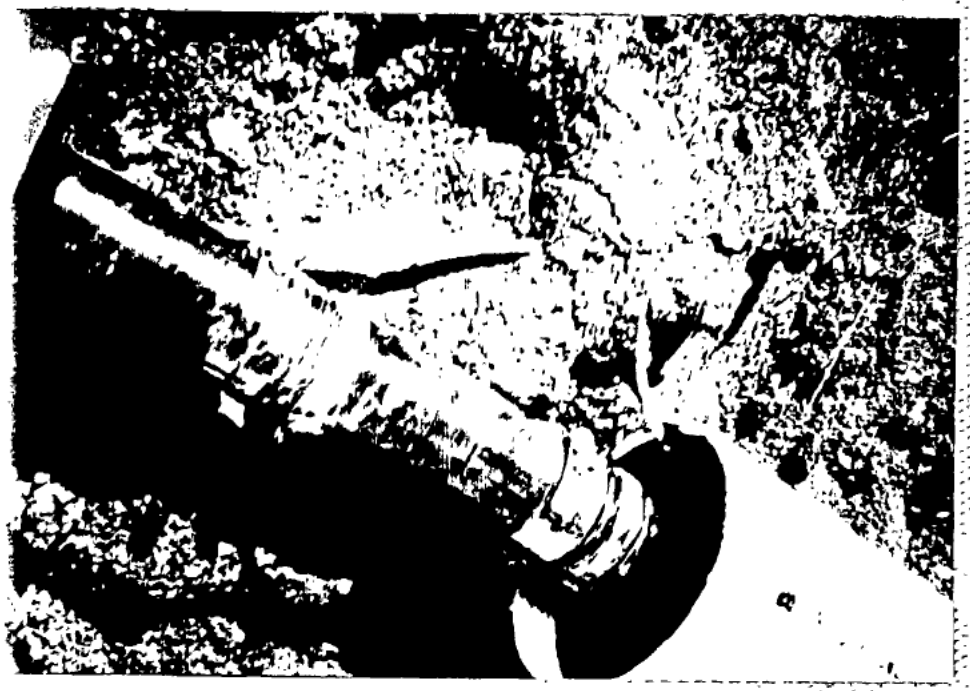
B

C



D





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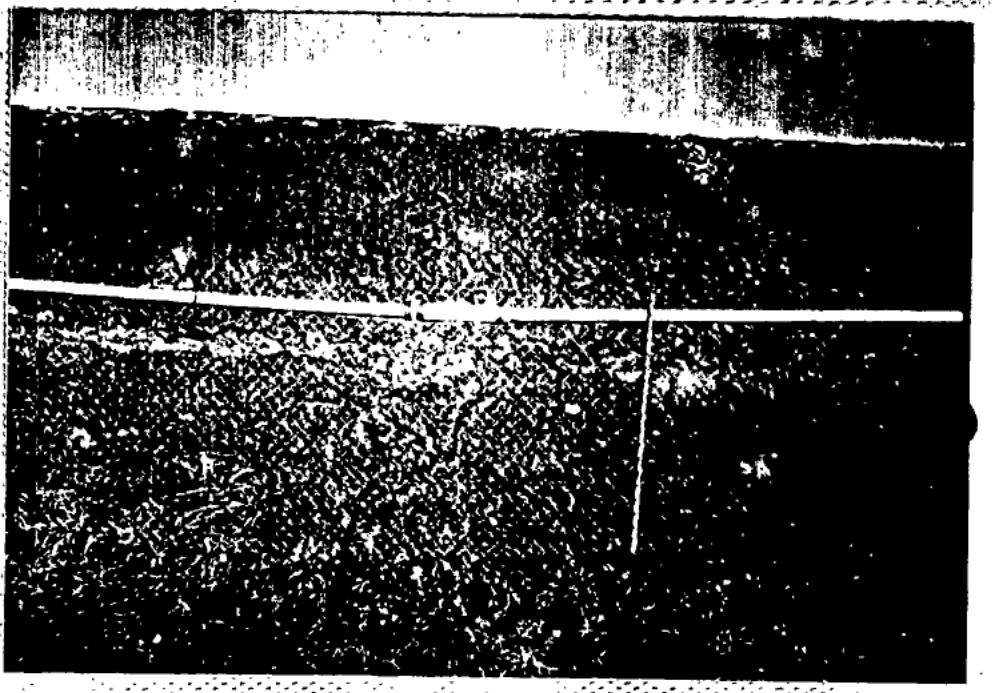

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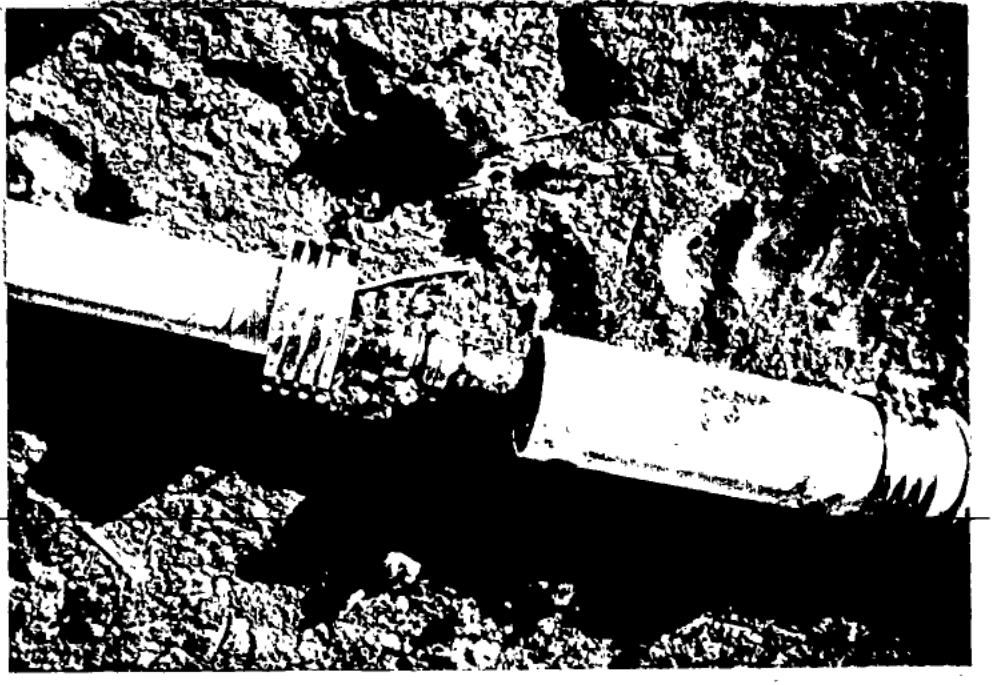

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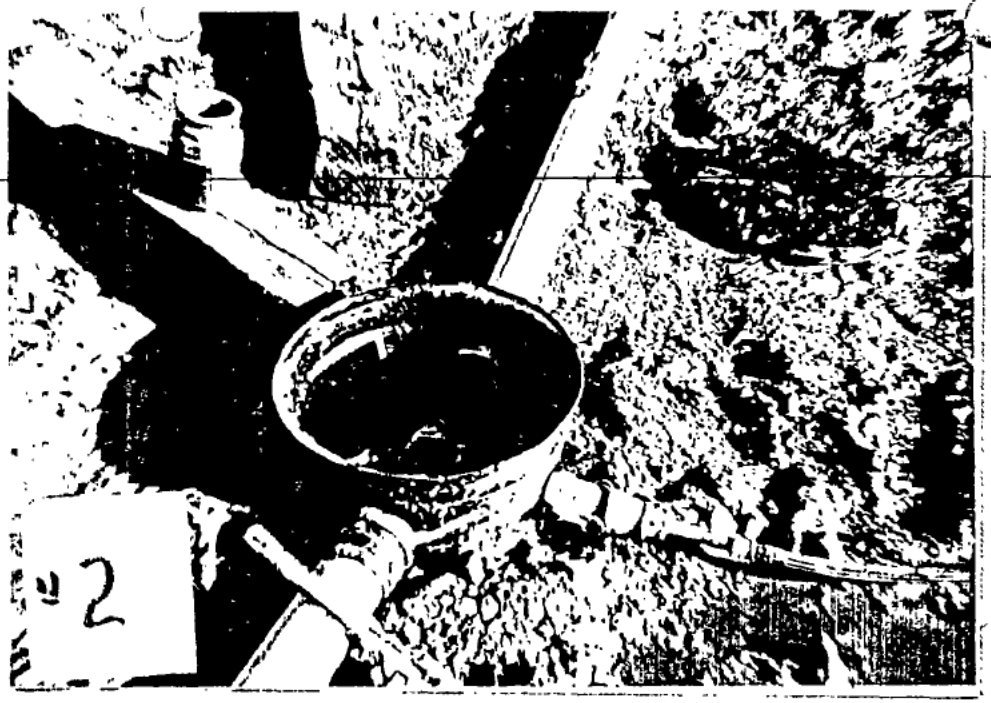


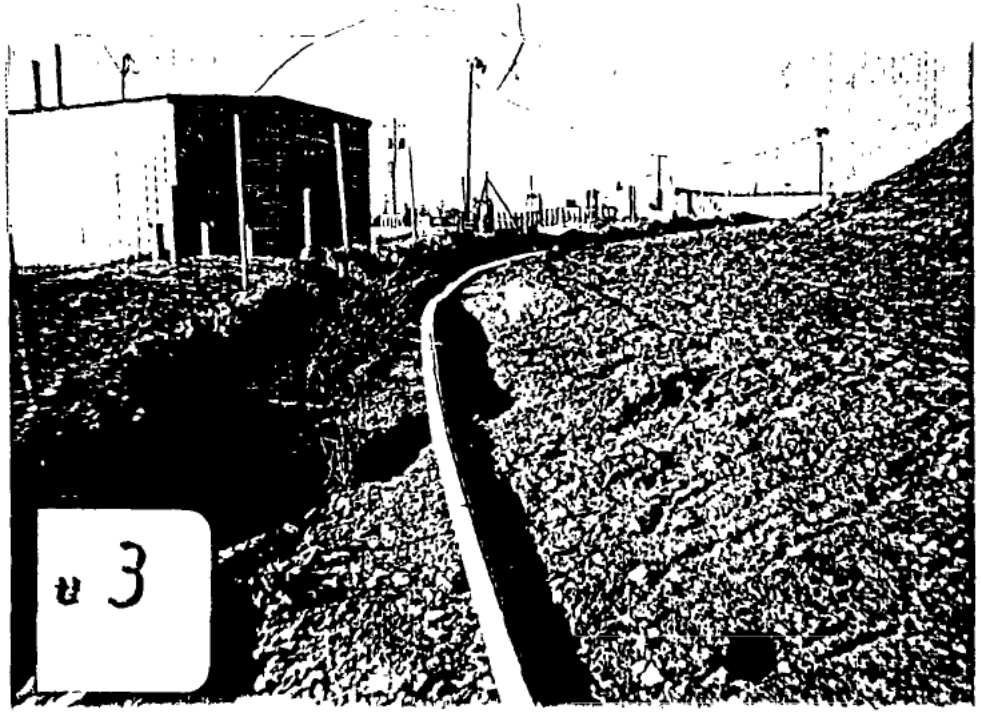
Photographs taken November 11, 1988

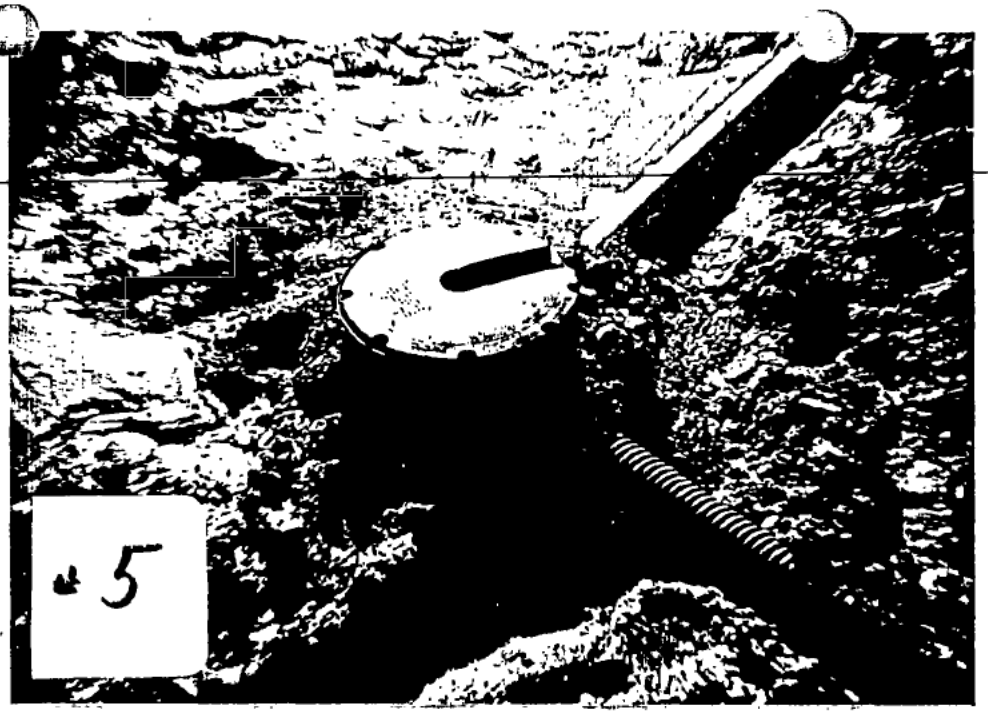
Photo Locations

Keyed to Drawing

TP 1

Photo	Description
1	Pressusre Test Workers
2	Pressure Test Connection
3	On Ground Pipe Line
4	Termination in Contained Area
5	TYP Leak Detection Pot
6	Heavy Wall Steel Protection Under Road

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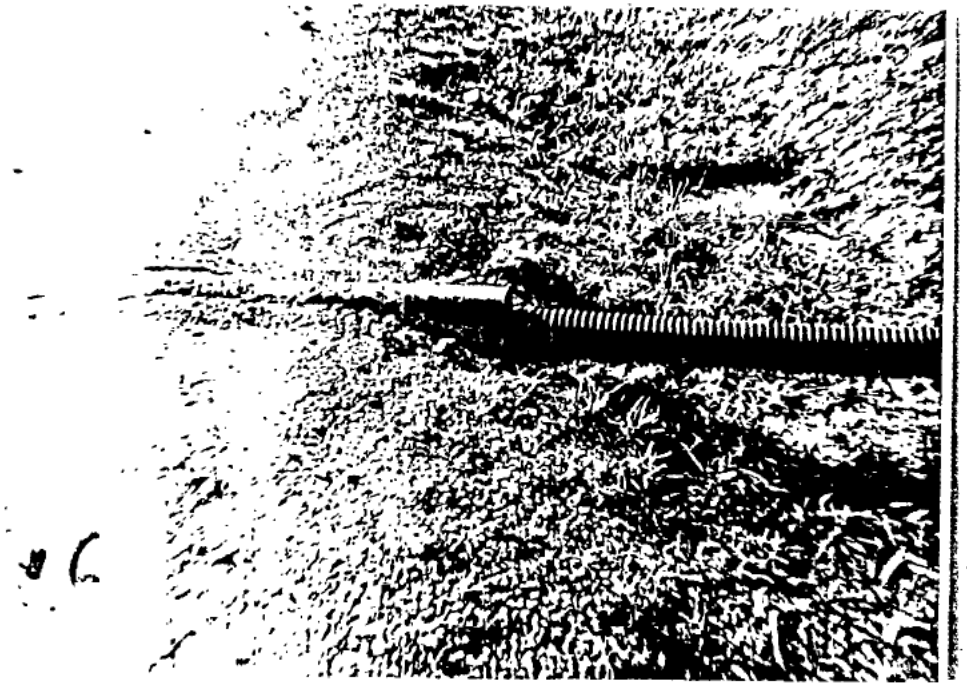

#6


#4

Chemical Waste Management, Inc.
3956 State Rt 412
Vickery Ohio 43464
419/547-7791

O: WMD
CC: RF

December 20, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 538 744 944

Mr. Valdus Adamkus, Director
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Dear Mr. Adamkus,

Please find enclosed two (2) tank system release reports that describe what happened, our response actions, actions taken to prevent further release, and clean up procedures followed.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please don't hesitate to call me at (419) 547-7791.

Sincerely,

CHEMICAL WASTE MANAGEMENT, INC.

F. G. Nicar
General Manager

FGN/ms
cc: Scott Maris
Charles Hull, OEPA/NWDO

Tank System Release Report

1. Date of release: 11-30-88 2. Reported to: OEPA, D.FERGUSON
   OEPA/ER, SAYCE
   NRC, WELLMAN

3. Date reported: 11-30-88 4. Released material: Mixed waste waters F006, F008, F009 & K062

5. Amount released: 1 Gallon

6. Release location: To the ground below #6 injection line.

7. Source of release: A 1/2" inch vent nipple on #6 injection line.

8. How was the release stopped? #6 injection system was shut down.

9. Cause of release: Failure to properly dope the 1/2" line vent nipple following maintenance.

10. Mechanism(s) in place to prevent further releases to the environment: The vent nipple threads were properly doped and the cap was properly secured.

11. Efforts taken to prevent further migration to soil or surface water: Contaminated soil was limed, collected and will be properly disposed of off site.

12. Likely route of migration of the release:

    The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts inter-connected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup.

13. Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):

    The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA and OEPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to Craig Liska, USEPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to Michael Walker, USEPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to Michael Walker, William Muno, and Rick Karl, USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to Dan Banazek and Michael Walker, USEPA, May 11, 1984)

14. Results of any monitoring or sampling conducted in connection with the release: pH 12.70 and PCB'S < 0.5 PPM.

15. Proximity to downgradient drinking water, surface water, and population areas:

The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well, associated with the truck unloading building, has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is 126 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

16. Description of response actions taken or planned:

Cleanup of the release was enacted as described earlier. No further actions are planned.

Form Completed By: William J. Blechinger

ms/FORM2

Tank System Release Report

1. Date of release: 12-2-88 2. Reported to: OEPA, J.STEERS
OEPA/ER, RICH CARTER
NRC, M.EWOLDT

3. Date reported: 12-2-88 4. Released material: Mixed waste waters F006, F008, F009 & K062

5. Amount released: Approximately 400 Gallons

6. Release location: To the ground around pump house #3

7. Source of release: A plunger port on injection pump #2

8. How was the release stopped? The release was stopped by shutting the feed valve to injection pump #2.

9. Cause of release: Malfunction of a plunger packing gland.

10. Mechanism(s) in place to prevent further releases to the environment: Injection pump #2 was repaired.

11. Efforts taken to prevent further migration to soil or surface water: Contaminated soil was limed, collected and will be properly disposed of off-site.

12. Likely route of migration of the release:

The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts interconnected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup.

13. Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate):

The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA, and OEPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to Craig Liska, USEPA, August 15, 1986)

Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to Michael Walker, USEPA, July 15, 1983)

Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to Michael Walker, William Muno, and Rick Karl, USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984. (Submitted to Dan Banazek and Michael Walker, USEPA, May 11, 1984)

14. Results of any monitoring or sampling conducted in connection with the release: Contaiminted soil: pH 3.0 and PCB's < 1 PPM and pH 8.35 and PCB's < 1. Clean Soil: pH 6.85 and PCB's < 1, pH 8.6 and PCB's < 1, pH 8.05 and PCB's < 1.

15. Proximity to downgradient drinking water, surface water, and population areas:

The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well, associated with the truck unloading building, has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is 126 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

16. Description of response actions taken or planned:

Cleanup of the release was enacted as described earlier. No further actions are planned.

Form Completed By: William J. Blechinger

ms/FORM2

Chemical Waste Management, Inc.
3956 State Rt 412
Vickery, Ohio 43464
419/547-7791

September 8, 1987

PUROLATOR COURIER
#141604741

Valdus Adamkus
Regional Administrator
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Dear Mr. Adamkus,

Please find enclosed two (2) Tank System Release Reports that describe what happened, our response actions, actions taken to prevent further release, and clean up procedures followed.

If you have any questions, please don't hesitate to call me.

Sincerely

CHEMICAL WASTE MANAGEMENT, INC.

Scott J. Maris
Environmental Manager

SJM/kt

enclosures

cc/Fred Nicar
Charles Hull, OEPA/NWDO

O. WMD -
CC: RF

Tank System Release Reporting Form

1. Date of release: 8/10/87

2. Reported to: Lt. Zell, NRC, OEPA Jeff Steers and Zack Clayton

3. Date reported: 8/10/87

4. Released material: Pond acid/K062, D002

5. Amount released: 5 gallons

6. Release location: To the ground approximately 50 feet west of Filter Building #1.

7. Source of release: A flange on the line between Pond 12 and Filter Acid Tank A (FAT A).

8. How was the release stopped? The pump was stopped.

9. Cause of release: A closed valve at FAT A caused a pressure build up in the line and resulted in leaking from the flange. Under normal climatic conditions, this would not have resulted in a release, however, temperatures in 90's in the day and in the 50's at night caused piping expansion and contraction which loosened the flange.

10. Mechanism(s) in place to prevent further releases to the environment: The flange was tightened.

11. Efforts taken to prevent further migration to soil or surface water: With a vacuum truck, the liquid was immediately picked up, lime was applied to the soil, and the soil was placed in drums for off-site disposal.

12. Likely route of migration of the release: The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts interconnected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup.

13. Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate): The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA. For additional details on these topics, please refer to:

Golder Associates, "Monitoring Program Hydrogeologic Study Chemical Waste Management, Inc., Vickery, Ohio Facility", July 1986. (Submitted to Craig Liska, USEPA, August 15, 1986)
Golder Associates, "Assessment of Perimeter Containment Dike Stability, Ponds 4, 5, 7, 11 and 12, Chemical Waste Management, Inc., Liquid Disposal Facility, Vickery, Ohio," June, 1983. (Submitted to Michael Walker, USEPA, July 15, 1983)

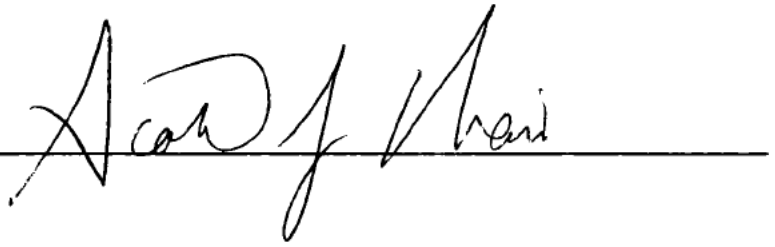
Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to Michael Walker, William Muno, and Rick Karl, USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984 (Submitted to Dan Banazek and Michael Walker, USEPA, May 11, 1984)

14. Results of any monitoring or sampling conducted in connection with the release: PCB concentration of soil less than 2.5 ppm.

15. Proximity to downgradient drinking water, surface water, and population areas: The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well associated with the truck wash has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is approximately 70 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

16. Description of response actions taken or planned: Cleanup of the release was enacted as described earlier. No further actions are planned.

Form Completed By: 

kt/FORM2

Tank System Release Reporting Form

1. Date of release: 8/23/87

2. Reported to: NRC P.O. Milazzo, OEPA ER Shirley

3. Date reported: 8/23/87

4. Released material: Waste Sulfuric Acid/K062, D002

5. Amount released: Approximately 20 gallons

6. Release location: To the Integrated Aqueous Waste Treatment System (IAWTS) pump pad and ground beside it.

7. Source of release: A mechanical seal on pump PAQ 300.

8. How was the release stopped? The pump was turned off.

9. Cause of release: Mechanical failure of the seal.

10. Mechanism(s) in place to prevent further releases to the environment: The seal was replaced.

11. Efforts taken to prevent further migration to soil or surface water: With a vacuum truck, released liquid was collected, lime was applied to the contaminated soil, and the soil was placed in drums for off-site disposal.

12. Likely route of migration of the release: The CWM Vickery Facility has in place a surface water control system through which surface water runon and runoff are controlled by a series of ditches and culverts interconnected by 31 slide gates. Using the slide gates, any spill on-site can be isolated, thereby preventing off-site migration and facilitating cleanup.

13. Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate): The site is underlain by about 33 feet to 52 feet of glacial overburden materials comprised of lacustrine clay and glacial till. The lacustrine clays exhibit very low permeability. Numerous studies detailing soil composition, geology, and hydrogeology at the Vickery site have been submitted to USEPA. For additional details on these topics, please refer to:

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Golder Associates, "Stability Analyses of Interior Dikes Between Lagoons 4/5 and 5/7, CWM Northern Ohio Treatment Facility, Vickery, Ohio," March, 1984. (Submitted to Michael Walker, William Muno, and Rick Karl, USEPA, March 8, 1984)

Golder Associates, "Groundwater Monitoring Program, CWM Northern Ohio Treatment Facility, Vickery, Ohio," April, 1984 (Submitted to Dan Banazek and Michael Walker, USEPA, May 11, 1984)

14. Results of any monitoring or sampling conducted in connection with the release: The contaminated soil pH after cleanup was 6.65 and the PCB concentration was less than 0.5 ppm.

15. Proximity to downgradient drinking water, surface water, and population areas: The closest potable drinking water well to the facility is located on-site, approximately 50 feet south of the V-tank building. Because the production well associated with the truck wash has been used during this period, the potable well is downgradient of the spill. The depth of the potable well is approximately 70 feet. The distance to the nearest surface water is approximately one half mile away. The spill was contained so the proximity of surface water and population area is not of concern with this spill.

16. Description of response actions taken or planned: Cleanup of the release was enacted as described earlier. No further actions are planned.

Form Completed By: Scott J. Kharas

kt/FORM2